WHOLE EARTH Review

ACCESS TO TOOLS AND IDEAS

NO. 49 WINTER 1985 $4.50 (CANADIAN $5.50)

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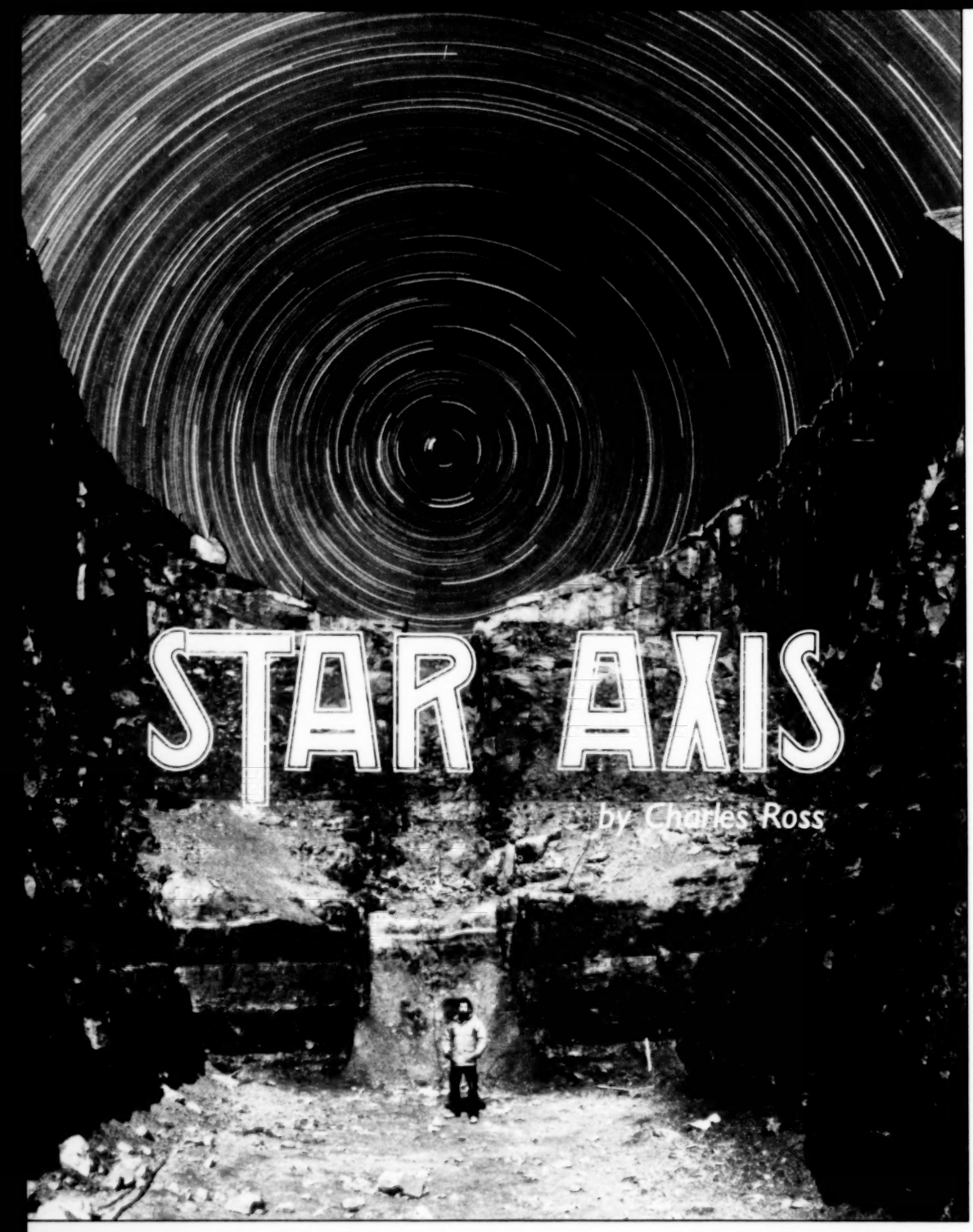
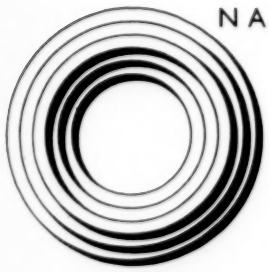


Circumpolar star trails framed by the excavation. Polaris is the small bright arc at the center. In this photo the trails were made by many different stars; Polaris will turn in each of these orbits at some past or future time. The central channel awaits placement of the sighting tunnel.

Inside the star tunnel: Viewing Polaris as it rolls around the rim.

A Work In Progress That Displays the Earth's Rotational Wobble



N A SMALL MESA where the Sangre de Christo Mountains meet the plains east of Albuquerque, I am building an earth/sky sculpture called *Star Axis* .

A conical wedge has been hewn deep into layers of rock to accommodate the underground placement of a stainless steel tunnel that will be exactly parallel to the spinning earth's axis in order to sight and frame the north celestial pole star. Standing inside the tunnel and observing without the aid of lens or magnification, the star gazer will be able to see how our planet changes its alignment to the stars over a 26,000-year period. Called precessions, this cycle, which is caused by the earth slowly wobbling like a spinning top, occurs over such an enormous time span as to be ordinarily imperceptible. Through *Star Axis* the entire cycle will be immediately visible.

Climbing the stairs of the star tunnel, one views progressively larger and larger circles of sky centered on the pole. From a particular stair, Polaris will be seen to roll around the far rim of the tunnel. Wherever one stands on the stairs, which are dated to give both past and future dates, the circle of sky framed by the tunnel will precisely represent Polaris's orbit for that particular epoch.

When the Egyptians were building pyramids, Thuban in the constellation of Draco marked true north. Now Polaris marks true north. In the year 2067 A.D., the Earth's axis will almost touch Polaris. Less than a blink away in astro-time, this rare alignment is framed from the first stair of the star tunnel.

About one quarter of the way up the tunnel is the circle where Polaris presently rolls around the rim with the turning of the earth. At the top of the tunnel, the largest orbit of Polaris encompasses the eye's entire field of view. By moving up and down the 11-story staircase, the viewer moves backward and forward in time and the vast time frame created by precession is spatially experienced.

The stairs emerge above the mesa through a 50-foot wedge-shaped tower tuned to the solar seasons. Solstice angles determine its shape. As the tower's shadow lengthens and contracts with the seasons, it defines a bow-shaped field. This shadow field is an artifact of precession projected in yearly solar time.

The sculpture, under construction since 1976, spans 1/5 of a mile across the top

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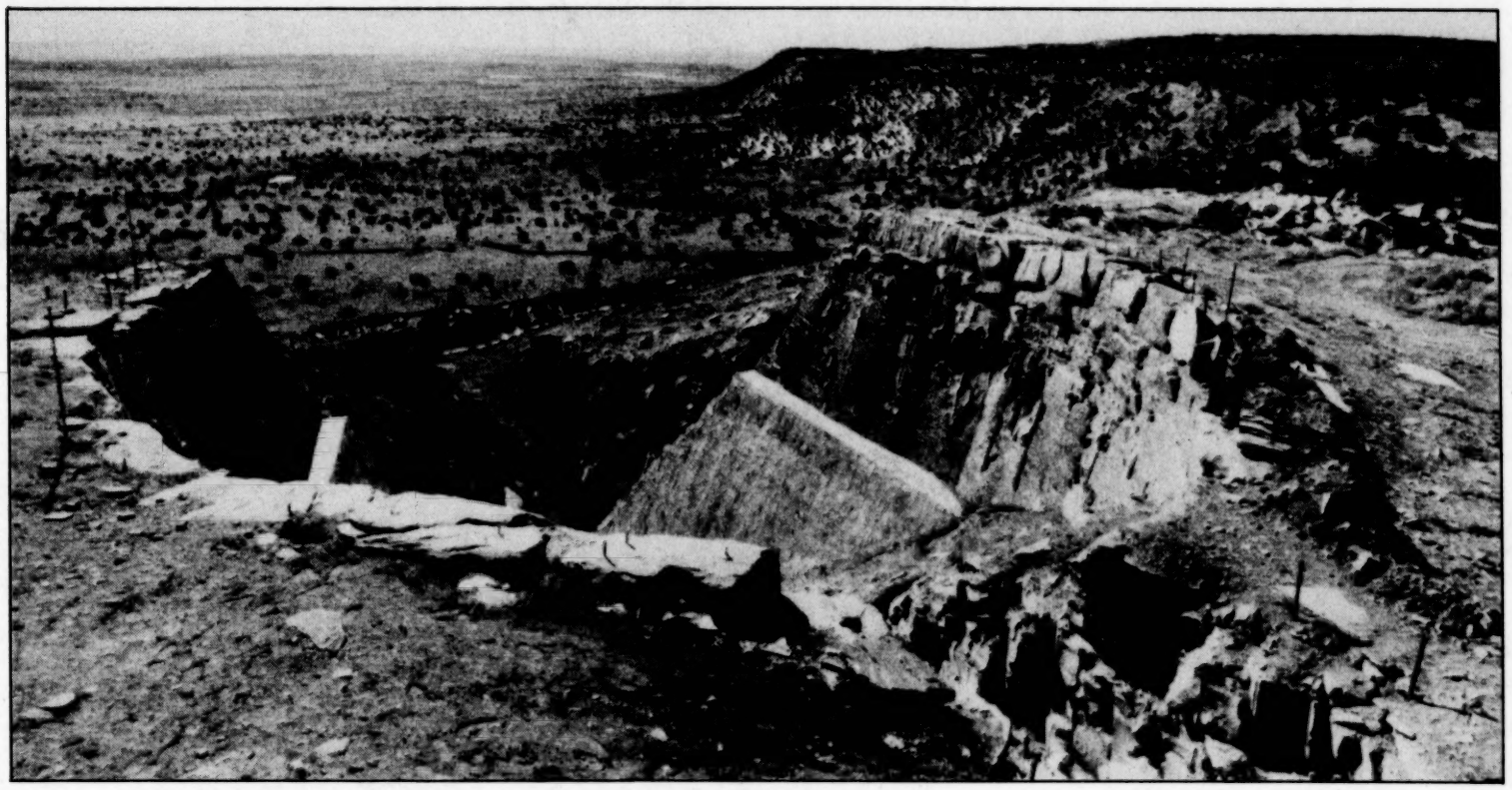
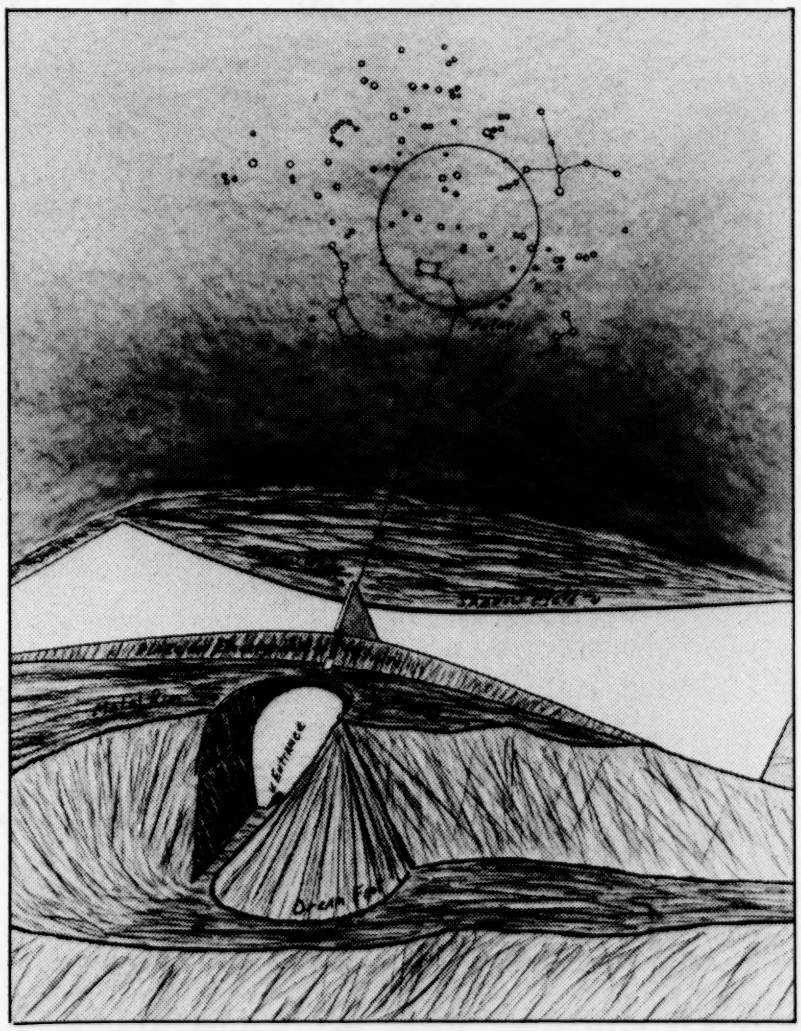
Much of Charles Ross's time has been devoted to this project since he last graced our pages ("Sunlight Convergence/Solar Burn," CQ #16, pp. 104-7). When will it be finished? Depends on cash flow. Ross has been paying for the land, surveying, excavation and construction with earnings from the sale of his other artwork. The stonework is pretty much done. What remains is fabrication of the stainless steel tunnel and rim. Patrons needed. Contact his agent: Joyce Pomeroy Schwartz, Ltd., 17 West 54th St., New York, NY 10019. Exact location of the site will be made public when construction is finished. —Robert Horvitz

The excavation: January 1985.



of the mesa. As work progresses there has been feedback from the land itself. In the summer of 1980 I had a recurring dream that demanded the work should have a "foot." At first I resisted. Then dreams on five consecutive nights described the shape in detail. Later I realized that not only does this form reflect the open cone as solid mass, but from an aerial view the two cones form the infinity symbol.

The site is isolated yet readily accessible. A two-lane blacktop road passes through the region and five miles of dirt road have been built to gain access to the land. You approach the work by walking along a path around the east face of the mesa. Above are weathered sandstone cliffs where the Golden Eagle and the Red-Tailed Hawk occasionally land to rest. Looking out across the wide terrain of red mesas and tawny plains, you can just detect the curvature of the earth. It is a short walk to *Star Axis* through a natural desert garden.



The present alignment of Star Axis in the circle of precession.

A FUTURE VISIT

Rounding Dream Foot, you enter the rock-faced cone. Precession is focused at your feet. The funnelled shape lifts your gaze upward to a stainless steel ring that caps the rock. It frames the earth's eternal wobble in a razor sharp half-circle of cobalt sky. The edge of the steel is polished so that during the day a small beam of sunlight is reflected in the rim.

Inside the tunnel the walls give off a soft metallic glow. As you climb the stairs you are moving parallel to the earth's axis. The expanding circles of sky are ripples in the earth/star dance. At the top, framed in the largest and most distant pulse of Polaris, you look down to see the present moment marked by a shadow on the year-shaped field.

THEATER OF THE SKY

Whenever I visit one of the ancient observatories, I am struck by the thought that although precise measurement is an essential ingredient, it was not the only purpose for their construction. These monuments give a strong feeling of personal connection with a larger natural order. The builders shaped their efforts to embrace the universe into art and architecture.

With roots in antiquity, but constructed with modern measurement, materials, and engineering, *Star Axis* is created as a bridge to a fresh consciousness of our alliance with the stars. It is the first and largest of a group of art works planned for the mesa. Each work will look into light to gain perspective on our cosmic range. It is not necessary to know the technical details. The art work guides direct experience. *Star Axis* is a theater of the sky played in light to time. ■

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COVER: *The courtyard of the Mosque reputed to be the tomb of 'Ali, fourth caliph of Islam, at Mazar-I-Sharif, Afghanistan, 1976. Photo by Kevin Kelly.*

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ISLAM AS OTHER

by Jay Kinney

THE ORIGINAL IDEA behind this Special Section was to present material on Islam that could provide a glimpse of its attractions. What is it about this major world religion that motivates such fervent enthusiasm among some adherents? In search of insights we contacted people — readers of *WER,* in many cases — who had converted to Islam or spent years in its orbit and asked them to help us see Islam through their eyes. Most other media are primed to present Islam as a Problem; we were curious about Islam as a Solution.

In the midst of assembling this section, the TWA airliner hostage crisis occurred, adding an edge of irony and poignancy to our project, but making that task seem even more vital. As the Middle East dilemma continues to worsen, the pressures increase to choose sides and resort to sweeping generalizations and stereotypes. Indeed, members of the domestic foreign policy academy like Amos Perlmutter, editor of the *Journal of Strategic Studies,* are busy promulgating the view that the U.S. is in the midst of a "general Islamic war waged against the West, Christianity, modern capitalism, Zionism and communism all at once." Perlmutter casts Iran and Libya in the same conspiratorial political roles as the Soviet Union and Cuba, and advocates that the U.S, "wage limited war against Iran's surrogates, clients and allies in much the same way we can battle the surrogates of the U.S.S.R. and Cuba." ("Containment Strategy for the Islamic Holy War," *Wall Street Journal,* Oct. 4, 1984.)

Islam, like communism, is thus being cast as a hostile, amorphous Other with which we have little in common and to which our best response is war. No matter that it is hardly clear whether what we are defending is something vague like "the American Way of Life" or more specific like the U.S. government or U.S.-based multinationals. All that seems certain is that "They" (vaguely defined) are out to get "Us" (vaguely defined).

With the administration in Washington already inclined to present complex phenomena in black and white terms, and its national constituency ever sensitive to humiliation, it is high time to examine whether Islam is indeed the Enemy, or perhaps a kind of mirror with which the West can evaluate its own fears and values.

❖

To presume to speak of Islam or any other religion or ideology with millions of adherents is, at best, to risk incoherence. As Edward Said underscores in *Covering Islam* (reviewed on p. 41), Islam is not a monolithic entity for which a few pat generalizations are sufficient description. Rather, there are a multitude of Islams: Muslims in Saudi Arabia, Malaysia, Pakistan and the U.S.; Sunni Muslims, Shi'ite Muslims, radical Muslims, conservative Muslims, Muslims now, and Muslims 1000 years ago.

All Muslims "submit to Allah" (which is the meaning of the Arabic word Islam), and are members of the Umma, the universal body of believers. But they are also variously affected by local customs, different schools of Islamic law, competing leaders, and political crises. Once this fact sinks in, the prospect of providing a meaningful overview of Islam seems difficult indeed. Yet, despite their differences, 800 million Muslims do hold enough in common that a general discussion of Islam is not totally pointless.

Two men in discussion outside the Mosque reputed to be the tomb of 'Ali, fourth caliph of Islam; Mazar-I-Sharif, Afghanistan, near the Soviet border, 1976. This photo and many of the others in the following pages were taken by Kevin Kelly, during treks through Islamic countries from 1976 through 1979.

Edmund Helminski begins things by examining those aspects of Islam which the West has particular difficulty in appreciating (p. 8). Latifa and Micha 'Abd al-Hayy Weinman provide access to different English translations of the Qur'an (p. 22) and Shaykh Hakin Moinuddin Chishti describes the fundamentals of the *salat,* the basic Muslim prayer (p. 17).

❖

The first step toward understanding something alien is the discovery of some common element shared by both you and the Other. In my own case, there were at least two instances of stumbling upon aspects of Islam that made me stop in my tracks and take a second look. The first of these was my reading of some of the writings of Sufism, the mystical current within Islam. These documents — stories, biographies, poetry, and sermons — had a universal quality which leapt across the centuries and oceans separating them from me. They provided a hint that there was more to Islam than I had originally thought.

The second instance was more recent and not connected to spiritual matters at all. This was my coming upon an issue of *Inquiry,* a British magazine published by and for Muslims. Once I got past the occasional slips in grammar and proofing which reminded me that English was not the first language of most of the journal's writers, I found an intriguing window into the heated discussions going on in Islamic intellectual circles.

Much to my surprise, as I explored back issues of the magazine, I discovered articles on Nuclear Winter, appropriate technology, the New Alchemy Institute, and the Club of Rome amidst more likely articles on subjects like Iran's revolution, Lebanon, Islamic calligraphy, and Pakistani banking. (For access information on *Inquiry* and other journals, see p. 36.)

Though *Inquiry,* like Sufism, should not be taken as representative of everyday, mainstream Islam, it was apparent to me that there are currents within that ocean of believers that run close to our shores. This is particularly difficult to keep in mind when kidnappings, car bombs, and civil wars shape our usual news of matters Islamic. That the Ayotollah Khomeini has cast the U.S. in the role of the "Great Satan" is not to be ignored, but neither is it the whole picture.

We would do well to remember that attacks on 'the West' or the U.S. are not attacks on us personally — and are not necessarily attacks on everything Western. Upon further investigation, it turns out that much of what is most objectionable to traditional Islamic cultures are those aspects of modern life which *WER* readers are also likely to criticize: rampant materialism, the whirlwinds of fashion, hedonism, the economic exploitation of the Third World, and the intervention of the Superpowers in local political disputes. ►►

An all-night Sufi meeting in Kashmir, India featuring sacred music and singing (1977).

This is not to say that if you scratch a *mullah* you'll find an unreconstructed granola-head underneath. Nor is it to condone desperate measures like plane hijackings or suicide attacks which grow out of specific local politics. Still, I can't help thinking (to turn Amos Perlmutter's quote on its head) that a worldview that is accused of waging war on "the West, Christianity, modern capitalism, Zionism and communism all at once" must have something worth listening to!

❖

If a vital mystical tradition and a wariness of rampant modernization are the aspects of Islam that are most immediately appealing, what of other aspects that are more threatening?

In confronting Islam, the West is, above all, brought face to face with its own past — echoes of earlier centuries when the eternal took precedence over the temporal, and religion was central to social existence, interpenetrating the rhythms and gestures of daily life. Such immersion in the humble satisfactions of religion is reminiscent of both the Church-dominated Middle Ages and the colonial days of Puritans and Quakers, neither of which is likely to produce much nostalgic enthusiasm these days.

Islam, which eschews monasticism, nevertheless instructs its followers to pray five times daily at prescribed times, a schedule of devotion paralleled in the West, these days, only at monasteries and convents. The average Westerner, witnessing the ordinary spectacle of a crowd on the street stopping on schedule to kneel and pray, is brought up short — as if having wandered by mistake into a convention of monks. The unselfconscious faith of the crowd contrasts with our own sophisticated faithlessness, making us ill at ease.

Or again, in our meeting with Qur'anic morality, where specific acts are forbidden in no uncertain terms and strict punishments spelled out, we're flung up against the very foundations of the modern, mobile West where freedom consists of keeping as many constraints as possible at arm's length. No alcohol? No pork chops? No bikinis? One can feel the shudders reverberating off the walls of shopping malls across the nation.

Yet here, too, the popular cliche is not always accurate. The *chador* (full-body veil) worn by women in Iran is not a universal Muslim custom, for instance, and both the Qur'an and the *Sharia* (Islamic Law) turn out to have sufficient room for a variety of interpretations on numerous points. Nevertheless, the situation of women within Islam is perhaps the main sticking point for most non-Muslims. Latifa Weinman, an American woman who has converted to Islam, gives her inside perspective on "Women and Islam" on p. 28. We've also reprinted a page from *Mahjubah: The Magazine for Muslim Women,* as an intriguing look at one brand of Iranian feminism.

While anti-Zionist or anti-Israeli sentiment is not inherently Islamic, it is nearly universal as a component of foreign policy for most Islamic countries and is echoed in most Muslim publications that touch on political issues. Ya'qub ibn Yusuf, a writer with ties to both Jewish and Muslim traditions, discusses both the factors separating Jews and Muslims in the Holy Land and the elements that bind them uniquely together.

Muslims performing the salat in Dakar, Senegal.

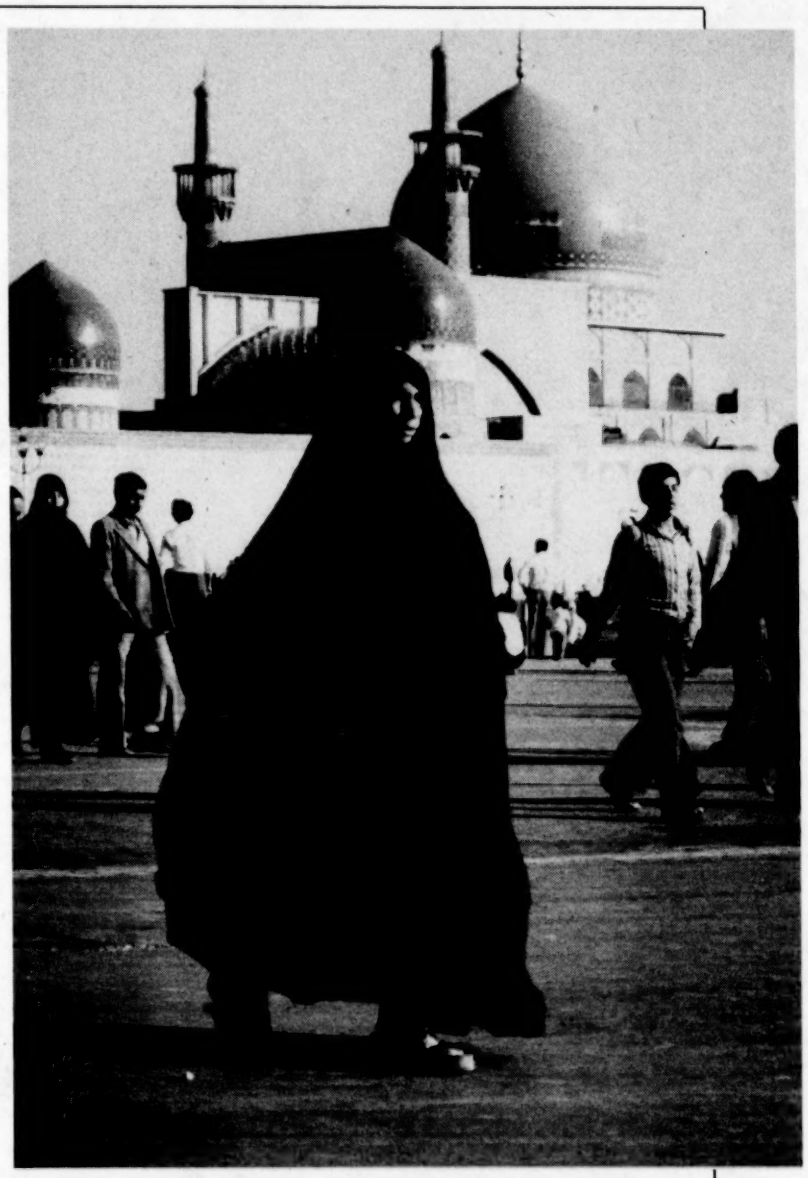
If Islam were solely a foreign phenomenon thousands of miles away, it might be possible to nod in abstract appreciation (or hostility) and let it go at that. However, in recent years Islam has seen significant growth in North America itself. A small portion of the growth could be attributed to domestic interest in Sufism, and a larger portion to the immigration of Muslims from abroad. But the most significant home-grown brand of Islam has been what began as the Black Muslim movement.

Originally founded by Elijah Muhammad as an

organization espousing an unorthodox blend of black separatism, radical politics, entrepreneurship, and Islam, the Nation of Islam proved puzzling to orthodox Muslims abroad. Malcolm X, the most famous leader in the movement, eventually abandoned the Nation of Islam for a more traditional Islam after traveling to Mecca and being impressed by the unity of Muslims irrespective of race. When Elijah Muhammad died and the movement's leadership fell to W. Deen Muhammad, the latter began to slowly make changes to the group along more orthodox lines.

Earlier this year, when W. Deen Muhammad disbanded the American Muslim Mission (formerly the Nation of Islam) and instructed his followers to consider themselves members of the world Islamic Umma (body of believers), he put the finishing touches on this process — taking the Black Muslim movement away from separatism and away from defining itself according to race. The new decentralized mosques across the U.S. may still look to W. Deen Muhammad for guidance, but they are financially and organizationally on their own. This marks a new stage for a movement which has succeeded in bringing Islam to inner cities and prisons where other religions were encountering stiff resistance.

With the barriers now down between the followers of W. Deen Muhammad and other American Muslims, it is likely that Islam will continue to grow here at home. The following material is presented with the hope that our understanding of it keeps pace with that growth. ■



A woman walking outside the Shrine of Imam Reza in Mashhad, Iran (1978).

Key Terms and Names

In order to understand Islam it is necessary to know the meaning of certain key terms and the identity of some proper names. Most of them are in the Arabic language, and there is often no equivalent in English or in other tongues.

Islam means submission, that is, submission to the will of God, the characteristic attitude of members of the Islamic faith.

Muslim (also spelled Moslem) is based on the same Arabic root as Islam (s-l-m) and means one who submits to God, that is, a believer in Islam. It is incorrect and objectionable to call members of this religion Muhammadans, as they do not worship Muhammad in the way Christians worship Christ.

Allah is the Supreme Being, the one and only God. According to Islam, Allah is the same God as that worshipped by the Jews and Christians, and Arabic-speaking Christians also use this name when referring to God.

Muhammad is the prophet or apostle of God to the Arabs. He was born in Arabia about 570 and died in 632. According to Islam he was the last of a line of prophets, including many of those of the Old Testament and Jesus Christ.

The Qur'an (also spelled Koran, Coran, Alkoran, etc.) is the holy scripture of Islam revealed by Allah to Muhammad. The word Qur'an means readings or recitations.

Mecca (also spelled Makkah) is the caravan town where Muhammad was born and raised. It is near the west coast of Arabia about 45 miles (72 kilometers) from the seaport of Jiddah and about midway between the northern and southern ends of the Red Sea.

Ka'ba, meaning "cube" in Arabic, is the principal shrine of Islam, located in Mecca. It is the center of the Muslim pilgrimage and the point towards which all Muslims the world over face in prayer.

Sunna means "tradition" and is the sum of the sayings and actions of Muhammad as recalled by his companions and followers. As such it is second only to the Qur'an as a source of Islamic belief and practices. Sunna (adjective Sunni or Sunnite) also denotes the mainstream or "orthodox" body of Muslims as opposed to Shi'a.

Shi'a (adjective Shi'i or Shi'ite) is the minority division (10-15 percent) of Islam, consisting of scores of dissident sects opposed to Sunna Islam and to one another. The name means "party" in the political sense and comes from *Shi'at Ali*, the party of Ali.

Ali was a cousin of Muhammad and married to the Prophet's daughter, Fatima. He was elected fourth caliph of Islam but lost his position through warfare and arbitration. The resulting conflict split Islam into the sects that exist today. His followers are called *Alids*.

Hadith, meaning communication or narrative, is the record of an individual saying or action of Muhammad taken as a model of behavior by Muslims.

Caliph, from Arabic *Khalifa*, means deputy or successor and is the title of the theoretical leader of Islam. The caliphate is now vacant in Sunna Islam. The Shi'ite sects have complicated beliefs concerning it.

—from *Islam: A Primer*, by John Sabini (reviewed on p. 21)

ISLAM:

BLIND SPOT OF THE WEST

by Edmund Helminski

THE WEST IS STRANGELY OBLIVIOUS to the Islamic tradition and way of life, and yet haunted by it at the same time. Westerners know less about Islam than about other major religions. Almost one-fifth of the world's population follows an ideal the West cannot seem to comprehend. The resistance, preconceptions, and fear associated in our minds with Muslims go back as far as our own Dark Ages.

I would like to make some observations about these people and their faith, things I gleaned while living and travelling among them over the last seven years. These ideas and stories helped to shatter some of the preconceptions and misconceptions I had inherited.

Islam and the Sword

It was especially difficult for me to understand how a prophet could wield a sword and how the origins of a faith could be associated with the battlefield. My idea of holiness had more to do with attaining enlightenment far from the pressures of society or giving oneself up to be crucified. A religion whose founder and close companions were warriors? This was a mystery.

Because of the common misconception that Islam was spread by the sword, it would be useful to ask where the Qur'an stands on the questions of war and aggression.

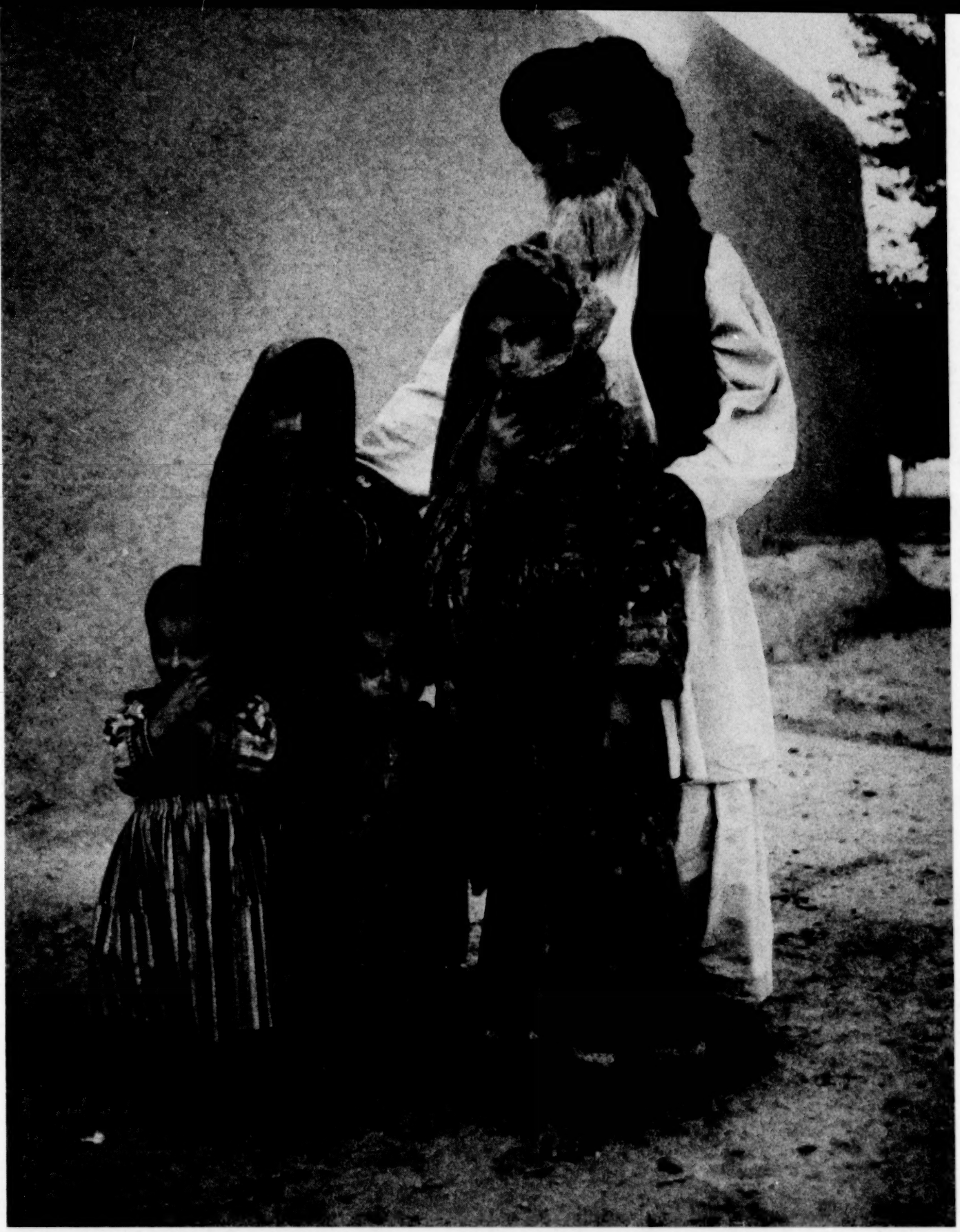
The Qur'an takes war as a fact of life and sanctions it as a last resort for self-defense and particularly where an aggressor has disturbed the peace, justice, and freedom of any people. But Islam does not itself permit aggression, imperialistic wars of any kind, or the attempt to impose belief by force.

Despite its reputation for living by the sword, Islam actually began in a kind of pacifism. During the early years in Mecca, the Prophet and his companions endured considerable cruelty and indignity. The Muslims were eventually forced to flee their homes in Mecca under the cover of darkness in order to escape with their lives. Later they conducted one of history's first nonviolent protest marches when they returned to the city that had forced them out. At the time of the annual pilgrimage, and at potentially great risk to their lives, they made a peaceful march to Mecca.

The Prophet and his people had been invited to live in Medina in the hope that they would help to solve some of the problems of this fragmented community. Here, among Muslims, Jews, and polytheists, Muhammad completed his first agreement as a head of state, the Pact of Yathrib: a document of great importance in international law. It was an agreement to live together peacefully and to provide for common defense with the guarantee that each of these smaller communities, a state in itself, would have control over its own people and the freedom to practice and preach its own religion. In this way the foundations of a Muslim state were laid.

While in Medina the Prophet resumed his public preaching and his "invitation" to Islam. In the meantime the Meccans continued to make raids, to take Muslim lives, and to foster treachery within Medina itself. It was only after years of patiently suffering persecution, the loss of their property and family connections, and finally the threat to the very existence of Muhammad's community itself that

*Edmund Helminski, the author of this article, wears many hats: graphic designer, publisher of Threshold Books, and translator of the mystical poetry of Jelaluddin Rumi (*The Ruins of the Heart, *1981, $5.45 postpaid from Threshold Books, R. D. 3, Box 1350, Putney, VT 05346). He lives with his family in Putney, Vermont.* —*Jay Kinney*



Kevin Kelly

A father and his children pose by the adobe wall of their homestead in Baluchistan, Pakistan, 1978.

divine "permission" came to engage in "struggle" (*Jihad*). War was permitted for self-defense and for freedom of belief. Allah's decision came in these verses:

> *Permission to fight is given to those against whom war has been made, because they have been wronged; and Allah is indeed Able to give them victory; those who have been driven out from their homes unjustly only because they said: Our Lord is Allah — For had it not been for Allah's repelling some men by means of others, cloisters and churches and synagogues and mosques, wherein the name of Allah is often mentioned, would assuredly have been pulled down. Verily Allah helpeth one who helpeth Him.* (Qur'an, 22:39-41).

During the last two decades of Muhammad's life, the new and still small community of Islam fought a life-and-death struggle against certain large, established tribes of the Arabian peninsula. The Muslims waged war as it had never been fought before. There was no destruction of homes or crops, no killing of noncombatant civilians, and eventually the Muslims returned to Mecca as victors and showed mercy to those who had been the cause of so much suffering.

To Westerners, *Jihad* suggests some wild, fanatical attack on the infidels. However, in its root meaning of struggle or effort, *Jihad* more importantly applies to the individual's struggle to overcome his own egoism in the service of God and mankind. Once after returning from a battle, the Prophet was heard to

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Pushtan tribesmen buying guns in Dara, Pakistan, a frontier town in the Khyber Pass near Afghanistan, 1978.

say: "We are returning from the lesser *Jihad*, to the greater *Jihad*, the struggle with our own selves."

Even when Islam extended itself beyond the borders of Arabia, Muhammad was not conquering an innocent people and forcing a religion on them. Rather, it was often the case that corrupt and weakened foreign empires were displaced by the new social order of Islam, which established a higher standard of justice as well as broader freedom of religious belief than had previously existed there.

After the new faith had consolidated Arabia, Palestine, Syria, and Egypt in the time of the fourth Caliph, Ali, a rebellion of a provincial governor brought into conflict the army of A'isha (the most beloved wife of Muhammad) with the army of the Caliph Ali (a most beloved companion and son-in-law of the Prophet). The rules for the conduct of war were so clearly established, and the love of Islam so strong on both sides, that the times of prayer were observed, both armies praying together under the banner of Ali.

It is hard to imagine the degree of selfless heroism and honor that prevailed in those early days. Hazrati 'Ali, a great leader and orator and the chief source of the inner teachings of Sufism, was also an invincible warrior. The following story appears in the introduction to *The Book of Sufi Chivalry* by Al-Sulami*:

In one of his battles against the unfaithful, Hazrati 'Ali encountered a handsome young warrior who moved to attack him. His heart filled with pity and compassion for the misguided youth. He cried out, "O young man, do you not know who I am? I am 'Ali the invincible. No one can escape from my sword. Go, and save yourself."

The young man continued toward him, sword in hand. "Why do you wish to attack me?" 'Ali said, "Why do you wish to die?" The young man answered, "I love a girl who vowed she would be mine if I killed you."
"But what if you die?" 'Ali asked.
"What is better than dying for the one I love?" he replied. "At worst would I not be relieved of the agonies of love?"

Hearing this response, 'Ali dropped his sword, took off his helmet, and stretched his neck like a sacrificial lamb.

Confronted by such an action, the love in the young man's heart was transformed into love for 'Ali and the one whom 'Ali loved (Allah).

Muhammad, The Human Model

In understanding Islamic culture there is nothing more important than understanding the example of the Prophet himself. From around his fortieth year, when the Qur'an began to be revealed, his life has been as completely documented as that of any major historical figure. Much of what he said and did, advice he gave in such various matters as politics, health and sexual counseling, was recorded. His life and sayings form a huge volume and are a source of guidance to the Muslim community.

A few of Muhammad's many interesting sayings follow.

Every religion has its distinctive virtue. With Islam it is modesty.

In the days of the first caliphs of Islam, even when their faith had spread over most of Arabia and the Holy Land, it would not have been unusual to find the Prophet not in some luxurious palace but camped beneath a palm tree next to his camel or donkey.

Assist your brother Muslim, whether he be oppressor or oppressed.

"But how shall we do it when he is an oppressor?" Muhammed said, "Assisting an oppressor is by forbidding and withholding him from oppression."

Muhammad's influence guided a people who had been continually involved in blood feuds toward a vision of brotherhood the world has never surpassed.

All Muslims are as one person. If a man complains of a pain in his head, his whole body complains; and if his eye complains, his whole body complains.

He went so far as to say that if a fly lands on the face of your brother, you should feel the discomfort too. This should explain to us why Muslims in general are not likely to forget the displacement of the Palestinians.

Poverty is my pride.
This was true of the way the early Muslims chose

* $10.45 postpaid from Inner Traditions, 377 Park Avenue S., New York, NY 10016.

*It was only after years of patiently suffering persecution, the loss of their property and family connections, and finally the threat to the very existence of Muhammad's community itself that divine "permission" came to engage in "struggle" (*Jihad*).*

to live. It gave a foundation for a life of voluntary simplicity. In my own travels I usually found that Muslims live quite simply; yet they are extravagantly generous in receiving guests.

It was for good reason that the German poet Rilke, upon visiting Egypt early in this century, said that one had the feeling in a Muslim country that the Prophet Muhammad had only died last week, so strong does his example live in the hearts and minds of his community.

Sacred Law

To understand the importance of the Sacred Law (*Shari'a*) it is helpful to appreciate the Islamic perception of prophecy. Muhammad is believed to be the last prophet or messenger in this cycle of humanity. He is the Seal of the Prophets, confirming what all other prophets had previously brought: an affirmation of the singularity of God, a benevolent and merciful ultimate reality.

At different times, various prophets have come with a sacred law, a code of living. Muhammad, too, is the bearer of a Sacred Law or *Shari'a*. The *Shari'a* is believed to be a guide for mankind outlining the knowledge necessary for a healthy human life and a justly ordered society. Specific penalties, such as cutting off the hands of a thief, are maximum penalties, not fixed and arbitrary laws.

Once in the time of the Caliph Omar, a man was brought before the Caliph for theft. In the process of questioning, it was learned that this man had been stealing to provide food for his family. When asked about his livelihood, the man explained that his wages were not enough to provide food for his family. Convinced of the man's honesty, the Caliph sent for his employer who was given warning: if this man were again forced to steal to meet his need, it might be the employer's hand that would be struck off.

THE Sacred Law sets limits on justice, clearly establishes the rights of women, requires charity for the needy, and establishes religious freedom for all monotheists or "people with a Book," as well as enjoining regular prayer, a yearly fast, and a pilgrimage once in each Muslim's life if possible. It also guards against the development of a priestly class, advises against withdrawal from life and community, discourages monasticism and asceticism, and provides clear guidance for the devotional and mystical side of life.

It is important to understand that the Law is not considered in any way to be the invention of Muhammad. In fact, the Qur'an was revealed in exquisite and compelling Arabic verse of the highest literary quality. These *Suras,* or verses, were heard, memorized, transcribed, and seem to have been received whole and complete through an agency of inspiration said to be the Archangel Gabriel. The Qur'an amounts to approximately 300 typical book pages. To this day many people in the Islamic world have it memorized and can recite it with stunning intonation.

The Qur'an

The Qur'an may be one of the most important and least understood books in human history. It is important because it is the primary focus of the lives of about one of every five human beings. To Muslims the Qur'an is the word of God made manifest, confirming and clarifying all previous revelations to humanity. Its place in Christian terms is not analogous to the Bible, but to Christ himself. Muslims consider the Arabic Qur'an to be an earthly copy of a "book" existing outside of space and time. It is

Muhammad's marriage to Khadijah, who is seen sitting in a recess while her proxy speaks her consent. Both Muhammad and Khadijah are depicted wearing veils as a sign of respect and a guard against idolatry.

Muhammad did not believe he was bringing anything new to the world; he expected all too innocently that other monotheists, particularly Christians and Jews, would immediately recognize the truth that was coming through him as being the same truth they believed in.

the special gift of a benevolent and generous higher Truth, an expression of that Truth's love for mankind. It contains the reminders and guidance necessary and suitable for "all the worlds."

Despite its importance as a living force shaping the lives of one-fifth of the world's population, it seems as if the West has a cultural block against it. It is not widely read or taught, and those rare individuals inclined to pick it up may find themselves putting it down, bewildered or irritated by its form and content.

Its form is extremely peculiar to the Western mind. The chapters, or *Suras,* are presented in order of length — the longest first, the shortest last. The first and longest chapters are the most legalistic, while the later, shorter chapters are generally more lyrical and inspired. Moreover, the titles of the *Suras* do not necessariy describe their contents, but are signifiers applied later to uniquely identify each chapter.

Stylistically, the Qur'an is repetitious and rambling, without a systematic form of presentation. The repetition of familiar themes in new contexts acquires a power of its own, but it may seem disorganized to some readers outside the cultural context of Islam. If, for instance, one wanted to find out what the Qur'an says about Moses, one would discover that references to him are found scattered throughout the book.

Most significant of the Qur'an's obstacles is the impossibility of direct translation. To appreciate this fully, one needs to experience the Qur'an as a "reading," which is literally what its name means. To hear it read, in Arabic, in a mosque during communal prayers is to experience a use of language that has no equivalent in the West — more than poetry, more than liturgy. It is in this milieu of the recitation that the Qur'an can be heard as it was meant to be heard — the poetry of some deeper intelligence, written to mankind, a warning and a reminder that there is a straight way, and that the evil man can do to himself is great. It is passionate, completely authoritative, free of all sentimentality and conventional piety.

What are some of its principle themes?

The Qur'an constantly reiterates the theme of God's goodness, mercy, and generosity. It is said that God has qualities of "mercy" and qualities of "wrath," but the mercy supercedes the wrath. Allah is not only the concealer and forgiver of man's sins: He also has the power to completely eliminate man's sins. The Qur'an specifies a preeternal covenant between reality and the individualized soul. This is dramatically portrayed when each soul is asked in preeternity, "Am I not your Lord?" and the souls confirm this by answering, "Truly, Thou art."

The Qur'an is insistent on the matter of sin, and we would rather not hear about it. We do not want to be told what we already know so well — the evil that man does to other men and to himself. The Qur'an reminds and warns, and if we reflect on the history of human life and the self-destructive possibilities of human cultures, we may find this reminder is not so far off the mark. It is harsh realism.

I am told by native-speaking Arabs that to hear a single line from the Qur'an and to compare it with any line from the sayings of Muhammad is to instantly recognize a clear and unmistakable difference in literary quality. Obviously, the question of the origin and authenticity of this text raises many questions for anyone not completely antagonistic to this faith. Whether it is the product of the One God, or the subconscious mind of man, or even, as Thomas Carlisle suggested, a legitimate communication of the intelligence of "Nature" itself, I do not believe that such a document could have in any sense been constructed as a hoax.

Primordial Religion

The Qur'an is also a commentary on the religious history of mankind. It states that the number of prophets and messengers that have been sent to mankind have numbered in the hundreds of thousands. Their authenticity is not to be questioned, no one is better than another. Muhammad is historically the last of these messengers and his mission of prophecy was necessary because the purity of earlier revelations became muddied through time as humans introduced innovations and misunderstandings of their own, among them asceticism and withdrawal from life, the exclusive "divinity" of Jesus, and the legalistic burdens imposed by priesthoods.

Islam emphasizes a balanced life without extremes in religion. People are encouraged to "remember" God in family life, in marriage and sexual fulfillment, in strong community ties, and in recognizing the brotherhood of man. Consequently monasticism and celibacy were discouraged. Extreme asceticism was forbidden. The Prophet even said, "Let there be no difficulty in religion. Surely Allah doesn't wish to make things more difficult for you but more easy."

The religion sent through Muhammad was, therefore, only a reaffirmation of the primordial religion of man. "Religion" here has the meaning of some-

thing that is obvious neither to the senses nor to the intellect, but can nevertheless be known through the heart or inner faculties of man. Muhammad did not believe he was bringing anything new to the world; he expected all too innocently that other monotheists, particularly Christians and Jews, would immediately recognize the truth that was coming through him as being the same truth they believed in. This last revelation was the latest installment confirming what Abraham, David, Solomon, Moses, Jesus (and perhaps Krishna, Buddha, Zoroaster, among the "others" so cryptically designated) had brought. A Muslim is to accept them all without distinction. None were exclusively divine; all were messengers. All represented the One Religion, known as Submission (Islam).

Liberality

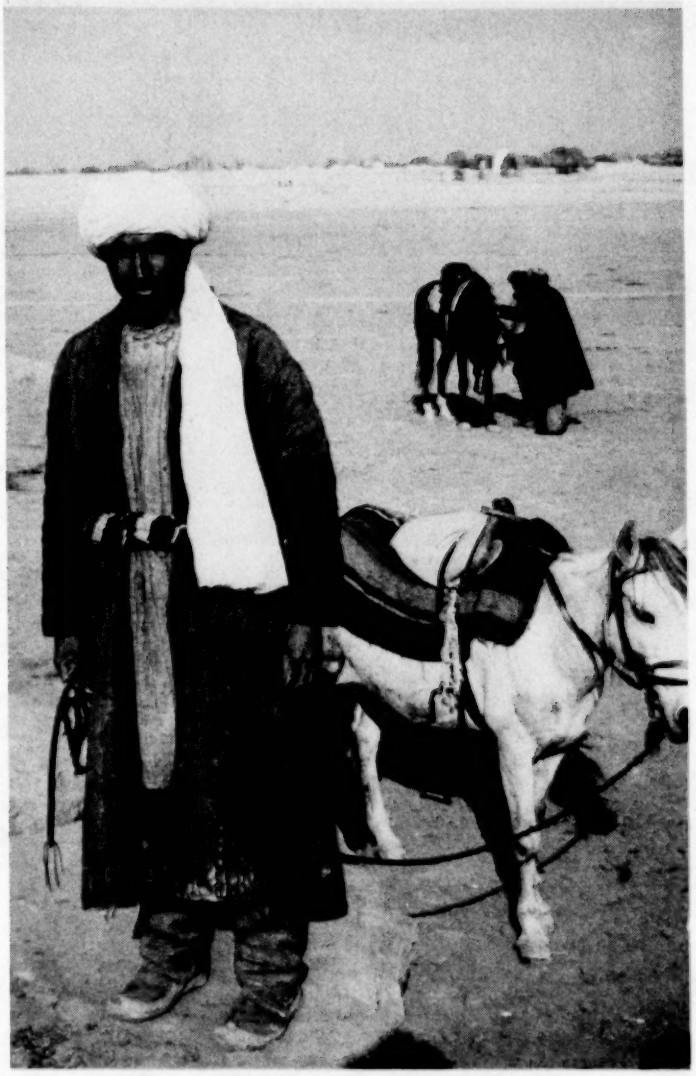
Although Islam sets a high standard of personal morality and demands ritual worship, fasting, and social responsibility, it was less law-bound than most faiths around in Muhammad's time, especially legalistic Judaism and ascetic Christianity. A Muslim was enjoined to keep as much of the religion as possible. There is a saying attributed to the Prophet to the effect that in his time it was necessary to keep 90 percent of the prescribed practices but that in later centuries, near the end of time, 10 percent might be enough to assure spiritual security.

There is no way to say for sure who is or is not a Muslim. Scholars have puzzled over what conversion to Islam entailed in the early days and found no prescribed ritual, no particular authorization. It was simply enough to have said in the presence of another believer, "There are no gods but God and Muhammad is a messenger of God."

Once when talking to a Muslim who was obviously sincere in his beliefs but who failed to practice the five-times-a-day ritual prayer, I asked what really makes a Muslim — saying the prayers, etc. or something else? I was told that *no one* but Allah knows who is a Muslim, and even if one who prays and fulfills all the requirements, it is not known whether his prayers and practices are sincere enough to be received by Allah.

I HAVE heard Sufis say that it is not enough to prostrate yourself mechanically like a chicken pecking the ground. The Prophet himself put it this way: "Prayer without presence of heart is not valid." And no ritual observances will save you if you have an abusive tongue or have broken another's heart.

Once when the Prophet and his companions were camped in the desert, a wild looking Bedouin rode up, jumped off his camel and called: "Oh Prophet of God, can you tell me when the day of judgment will be?" Muhammad answered, "What have you done to prepare for that day?" "Nothing but love you," the Bedouin answered. Some of Muhammad's companions took offense and said this certainly could not be enough, but the Prophet cooled them down by saying, "Remember, haven't you been told that in Paradise you will be with those you love?"



A Buzkashi (goatball) player and his Arabian horse, in the Central Asian steppes, Afghanistan, 1976.

Religious Authority

Islam also has some safeguards against ecclesiastical tyranny. There really is no priesthood. Any person who performs the ritual prayer is engaging in as legitimate an act of worship as a priest saying mass. There is no intermediary between God and man. Even Khomeini derives his power not from the concept of ecclesiastic authority but from the simple fact that he claims to implement the Qur'an as he understands it.

If a class of religious professionals has developed, it is not because Islam requires it but because human beings allow and encourage such a class to develop. Doctrinally there is no authorization for such functionaries. One's relation to the Truth is ultimately based on one's own understanding of what has been clearly revealed in the Qur'an or stated by Muhammad. This, of course, is moderated by the general level of agreement that has been reached through the centuries by the practice of the *Umma,* or community of Islam, but no one has the authority to regulate belief, and there is a sanction for interpretation of the Qur'an through individual conscience.

Even the Imam (the leader of prayer) takes his position as a "facilitator," not an authority figure. The prayers can be lead by anyone and the job usually

The Qur'an ended the ancient practice of killing female children. It established the right of women to own property — 1300 years before a corresponding right was recognized in Western culture.

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A girl carrying water in Balkh, "the Mother of Cities," in northern Afghanistan, 1976.

falls on the head of the household, the local community leader, or an elder. Those who pray together in the mosque or anywhere else observe a strict convention of forming exact lines or ranks without any regard for professional status — laborer, professor, merchant, all shoulder to shoulder.

The Prophet said "In Islam all men are brothers," and this equality has always been one of the religion's prominent and attractive features. Even in the case of slavery, which was not completely abolished by the Qur'an, if one had slaves they were to be dressed and fed as well as their master. The faithful were told: "Allah loves nothing more than the freeing of a slave."

Prayer

The ritual prayer itself, performed five times a day, is both yoga and invocation. It combines the posture of standing upright, which affirms the human being's high station of being Truth's representative in this world; the bow, which emphasizes humility; and prostration, indicating one's complete submission to God the Real, the Beneficent.

The Muslim has the convenience of carrying his own sacred space with him wherever he is, by virtue of the prayer carpet on which the ritual worship is accomplished and the worshiper's orientation to Mecca (the direction in which prayers are said).

Women

The West greatly misunderstands the position of women in Islam. The Qur'an gives a large proportion of its verses to clarifying the rights of women. It ended the ancient practice of killing female children. It established the right of women to own property — 1300 years before a corresponding right was recognized in Western culture. Women may earn and keep money apart from their husbands so that, in case of a divorce, they might be independent. In the matter of divorce, the Prophet said that of all the things Allah permits, no other is so hateful to him. Nevertheless it is possible for either the man or the woman to request divorce when the basic responsibilities of marriage are not being fulfilled.

Sex

Islam has been misconstrued as puritanical and medieval in regard to sex. This does great injustice to Islamic teaching and practice on sexual matters. Perhaps more than any other religion, Islam recognizes the importance of a healthy sex life within the context of a committed relationship. Much is known about the sex life of the Prophet, how he treated his wives and seldom showed favorites, how sexual intimacy was cultivated. With the obvious example of the Prophet's virility and his deep and gentle love for women, Islam leaves little room for the unhealthy abhorrence or dismissal of sex found in some religious traditions. Muhammad himself said: "Three things of this world have been made for me worthy of love: women, fragrance, and prayer."

IN conclusion, it might be emphasized that we in the West might find many points of potential reconciliation with Islamic culture and might ourselves learn something about tolerance, social justice, human nature, and the universality of religions.

Islam is a religion and culture whose history has paralleled our own, dominating the world for many centuries in a way that the Christian West did not until relatively recently. From approximately the seventh through the fourteenth century, Islamic culture preserved civilization, spiritual values, and

scientific learning in much of the world. The West's Dark Ages were the golden age of Islam. For centuries the culture of Islam succeeded where the West and much of the world failed, by creating a civilization that could harmonize the values of ancient cultures with a vital spiritual force, assuring relative tolerance for religious diversity and a just and generous social order.

Above all Islam contributed to human character. It produced men of great learning and wisdom. It helped to develop human beings capable of inspired action and commitment to their communities and societies at the same time that it welcomed the insights of great mystics and integrated these insights into its teaching and institutions.

Islam is one of the few cultural forces sufficiently strong and coherent to offer effective critiques of both communism, in its materialistic and tyrannical manifestations, and contemporary secular/corporate capitalism. Islam stands in a critical relationship to the blind forces of both capitalism and communism. Although the Western World's attention may sometimes be captured by certain Islamic extremists, fanatics, or demagogues, it is for the hundreds of millions of people quietly trying to practice the brotherhood, religious tolerance, patience, modesty, and generosity that Islam essentially stands. In a world divided between East and West, Islam has the possibility of uniting into a third force, one that could exert a moderating influence on both East and West. ■

HADITH (Sayings of the Prophet)

Silence adorns the learned and veils the ignorant.

Avoid anything which requires an excuse.

All difficulty is forbidden; let there be no difficulty in religion.

Truly, the sons of Adam are most greedy for what is forbidden.

Faith is known by the heart, spoken by the tongue, carried out by the limbs.

The best remembrance of God is hidden; and the best living is that which suffices.

Truly, reducing pride and conceit is a task of seventy years.

A man's beauty is in the eloquence of his tongue.

The three best deeds: to be humble amid the changes of fortune; to pardon when powerful; and to be generous with no strings attached.

Worship Allah as if you see Him; if you do not see Him, know that He sees you.

Make all your cares into a single care, and Allah will see to all your cares.

An hour's meditation is better than a year's adoration.

The food of one is sufficient for two, the food of two is sufficient for four, and the food of four is sufficient for eight.

Eat together, not separately, for the blessing is to eat with company.

Give each other presents, for a present removes hatred.

There is a calamity for every people, and the calamity for my people is wealth.

When a man looks upon his wife and she upon him, God looks mercifully on them. When they join hands together their sins disappear in the interstices of their fingers. When he makes love to her the angels encircle the earth. Voluptuousness and desire are as beautiful as the mountains . . .

If a person is drowsy during his prayers, let him sleep until he knows what he says.

A'isha (his wife) was asked what the Prophet did in his house. She said, "He served his wife," meaning he did work for her.

For Further Reading

Since it is important that Muslims speak for themselves, I present this very brief bibliography:

***Major Themes of the Qur'an** by Fazlur Rahman (1980; $13.50 postpaid from Kafi Publications, 1215 West Belmont Avenue, Chicago, Il 60657). A very good introduction to the most important ideas of the Qur'an.*

***On the Duties of Brotherhood** by Al-Ghazali (translated by Muhtar Holland, 1976; $9.40 postpaid from The Overlook Press, RR1/Box 496, Woodstock, NY 12498). A profound treatise on the meaning of human relationships and the bond of brotherhood between people.*

***Traditions of the Prophet** by Ahadith (compiled by Dr. Javad Nurbaksh, 1981; $5.45 postpaid from Khanigahi-N'mutullahi Publications, 306 West 11th Street, New York, NY 10014). A succinct and generally available collection of Hadith.*

***Ideals and Realities of Islam** by Seyyed Hossein Nasr (1979; $8.45 postpaid from Allen & Unwin, 8 Winchester Terrace, Winchester, MA 01890). A very clear presentation of the doctrines and beliefs of Islam by one of the most distinguished Muslim thinkers in the West.* ■

Thanks to Office Computer Systems, Corte Madera, California, and Jim Kelly of MUG/MARIN for assistance in transferring this article from disk to type.

Muhammad: His Life Based on the Earliest Sources

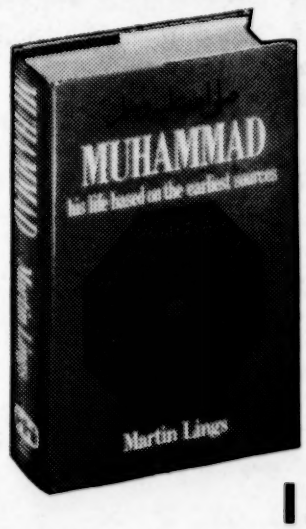
LATIFA WEINMAN: This is simply the best biography of Muhammad in English. Lings has based it on eighth and ninth century accounts — some translated here for the first time — from individuals who lived through these events, who heard and observed Muhammad. Meticulously researched and perceptively written, it leaves it up to readers to decide for themselves who was this noble, enigmatic, devout and very human prophet who had such an impact on past and present world history.

•

Jealousy was inevitable in the Prophet's household, and he did his best to make light of it. Once he came into a room where his wives and others of his family were assembled, and in his hand was an onyx necklace which had just been given him. Holding it out to them he said: "I shall give this unto her whom I love best of all."

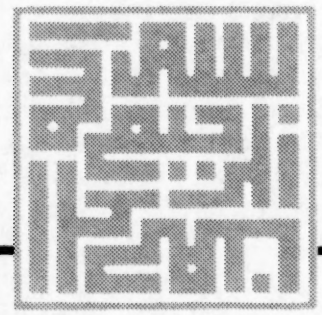
Some of the wives began to whisper wryly to each other: "He will give it to the daughter of Abu Bakr." But when he had kept them long enough in suspense, he called his little granddaughter Umamah to him and clasped it round her neck.

Muhammad: His Life Based on the Earliest Sources
Martin Lings
1983; 357 pp.
$24.95
($26.95 postpaid) from:
Inner Traditions
377 Park Avenue
New York, NY 10016
or Whole Earth Access



CHOOSING ISLAM

One Man's Tale



by Abd al-Hayy Moore

I BECAME A MUSLIM when it seemed I had already accepted Islam in my bones, as if beyond choice, and I only had to make a leap to embrace it formally. Outwardly I was content; inwardly I was coasting. My three-year-old theatre company was disbanded after a hilariously chaotic production for a Tim Leary Benefit at the Family Dog in San Francisco, circa '68 — naturally the orange juice everyone had passed around was spiked, so that chorus members were doing the final scene in the first ten minutes — and for six months I had been methodically typing out poetry manuscripts in my attic in Berkeley preparatory to a big publishing push.

I considered myself a Zen Buddhist. But I was other things as well. My normal routine was to get up, sit zazen, smoke a joint, do half an hour of yoga, then read the *Mathnawi* of Rumi, the long mystical poem of that great Persian Sufi of the thirteenth century.

Then I met the man who was to be my guide to our teacher in Morocco, Shaykh Muhammad ibn al-Habib, may Allah be pleased with him. At first the meeting was simply remarkable, and my guide simply a remarkable man. But soon our encounter was to become extraordinary, leading to a revolution in my life from which I have never recovered and never hope to.

The man looked like an eccentric Englishman. He too had only recently come out of the English version of the Hippie Wave. He was older, refined in his manners, spectacularly witty and intellectual, but of that kind prevalent then who had hobnobbed with the Beatles and knew the Tantric Art collection of Brian Jones firsthand. He had been on all the classic drug quests — peyote in the Yucatan, mescaline with Laura Huxley — but with the kif quest in Morocco he had stumbled on Islam, and then the Sufis, and the game was up. A profound change had taken place in his life that went far beyond the psychedelic experience.

For the three days following our meeting, two other Americans and I listened in awe as this magnificent story teller unfolded the picture of Islam, of the perfection of the Prophet Muhammad, peace be upon him, of the Sufis of Morocco, and of the 100-year-old plus Shaykh, sitting under a great fig tree in a garden with his disciples singing praises of Allah. It was everything I'd always dreamed of. It was poetry come alive. It was the visionary experience made part of daily life, with the Prophet perfectly balanced master of wisdom and simplicity, an historically accessible Buddha, with a mixture of the earthiness of Moses, the otherworldliness of Jesus, and a light all his own.

The prophetic knowledge our guide talked about was a kind of spiritual existentialism. It was a matter of how you enter a room, which foot you entered with, that you sipped water but gulped milk, that you said, "Bismillah" (In the Name of Allah) before eating or drinking, and "Al-hamdulillah" (Praise be to Allah) afterwards, and so on. But rather than seeing this as a burden of hundreds of "how-to's," it was more like what the LSD experience taught us, that there is a "right" way to do things that has, if you will, a cosmic resonance. It is a constant awareness of courtesy to the Creator and His creation that in itself ensures an almost visionary intensity.

It is hard to put forward any kind of explanation of Islam, to try to suggest the beauty of its totality, through the medium of words. The light of Islam, since it is transformational and alchemical in nature, almost always comes via a human messenger who is a transmitter of the picture by his very being.

Face to face with our guide, what struck us most was his impeccable, noble behavior. He seemed to be living what he was saying. Finally the moment came, as a surprise, when he confronted me with my life. "Well," he said one morning after three full days of rapturous agreement that what he was bringing us was the best thing we'd ever heard. "What do you think? Do you want to become a Muslim?"

I hedged. "It's the most beautiful thing I've heard about so far. After all my Zen Buddhism, all my yoga, Tibetan Buddhism and Hindu gurus, this is certainly it! But I think I'd like to travel a little, see the world, go to Afghanistan (then unoccupied), maybe meet my Shaykh in a mountain village far off somewhere."

"That's not good enough. You have to decide now. Yes or no. If it's yes, then we start on a great adventure. If it's no, then no blame, I've done my duty. I'll just say goodbye and go on my way. But you have to decide now. I'll go downstairs and read a magazine and wait. Take your time."

When he had left the room I saw there was no choice. My whole being had already acquiesced. All my years up to that moment simply rolled away. I was face-to-face with worship of Allah, wholly and purely, with the Path before me well-trodden, heavily signposted, with a guide to a Master plunk in front of me. Or I could reject all of this for a totally self-invented and uncertain future.

It was the day of my birthday, just to make it that much more dramatic. I chose Islam. ■

Abd al-Hayy Moore has had two books of poetry published by City Lights under the name Daniel Moore. He's traveled extensively, living in England, Morocco, Algeria, Nigeria, and Spain. He currently lives in Santa Monica, California. His most recent publication is a book-length poem, The Desert is the Only Way Out *(1985; $4.50 postpaid from Zilzal Press, 132 North Milpas Street, Santa Barbara, CA 93103).* —*Jay Kinney*

Salat

The Muslim Postures of Prayer

by Shaykh Hakim Moinuddin Chishti

Salat is at once an external and an internal practice: a set of physical exercises (some have compared them to yoga *asanas*), and the richest spiritual nourishment.

The practice of *salat* is performed at five regular intervals throughout the day as a minimum and can be done at other times according to the capacities of the worshiper. The times of performance are fixed according to the journey of the sun and planets across the heavens. These times are as follows:

> ***Fajr:*** Begins approximately forty-five minutes before sunrise and extends up to the rising of the sun.
>
> ***Zuhr:*** Begins after the sun has passed the median point in the sky and has just begun its downward arc.
>
> ***'Asr:*** Begins when the sun has crossed a bisection of the arc made by the sun, mid-point between noon and the line of the horizon; or when the body's shadow is equal to two body lengths.
>
> ***Maghrib:*** Begins just after the sun has set below the horizon and no light is left reflecting off the clouds (i.e., there is no more redness).
>
> ***'Isha:*** Begins when night has fully fallen, approximately one hour and twenty minutes after the time of *mahgrib*, or sunset.

By following these prayer times, one is perfectly attuned to the motions of the planets, seasonal changes, and geographic variations. In so doing, one becomes harmonized with all of the natural cycles of the universe.

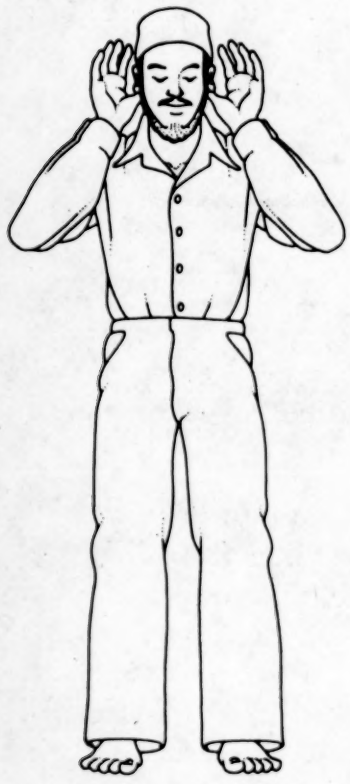
There are three aspects to the *salat:* thought, word, and action. Before beginning the *salat,* one must clean oneself of any physical dirt on the body or clothing, or on the place where one intends to pray. At this same time, one must drive out all negative or evil thoughts and cleanse the mind to concentrate fully upon the glory of Allah the Almighty. This preparation, called *wudu,* consists of washing the hands, rinsing the mouth (and brushing teeth if necessary), snuffing water up the nose, wiping the face from brow to chin and from ear to ear, washing the forearms from the wrists up to the elbows, wiping over the head and the back of the neck, and, finally, washing the feet up to the ankle bone. Each of these washings is repeated three times and must be done in the sequence described.

The *salat* is done by assuming eight separate positions of the body (*arkan*), and reciting various Qur'anic verses with each posture. These postures are illustrated in turn, and a brief description is given of the benefits ascribed to each. ►

Muslims are obliged to carry out several duties — known as the Five Pillars of Islam — in order to assure their place in Eternity. These are the testimony of faith, prayer, almsgiving, fasting during the month of Ramadan, and pilgrimage to Mecca. While salat *(prayer) may be the most superficially familiar, few non-Muslims are actually aware of its ritual components. This excerpt from* The Book of Sufi Healing *($12.95, plus $1.50 postage, from Inner Traditions Int., Ltd., 377 Park Avenue South, New York, NY 10016) both describes* salat *as a religious practice and discusses its health-imparting aspects as well.*

—Jay Kinney

POSTURE 1

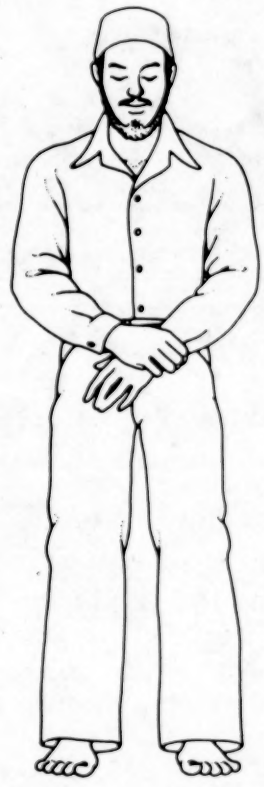


Name of Posture: Niyyat
Time to Be Held: 5 seconds
Recitation: Allāhu akbar.

Bring hands, palms open, up to ears, and place thumbs behind earlobes, as *"Allāhu akbar"* (God is Great) is uttered.

Beneficial Effects: Body feels relieved of weight owing to even distribution on both feet. Straightening back improves posture. Mind is brought under control of intellect. Vision is sharpened by focusing upon floor, where head will prostrate. Muscles of upper and lower back are loosened. Higher and lower centers of brain are united to form singleness of purpose.

POSTURE 2



Name of Posture: Qiyām
Duration: 40–60 seconds
Recitation:
Bismi Llāh ir-Raḥmān ir-Raḥīm
Al-ḥamdu li-Llāhi rabb il-ᶜālamīn.
Ar-Raḥmān, ir-Raḥīm.
Māliki yawm id-Dīn.
Iyyāka na ᶜbudu wa iyyāka nasta ᶜīn.
Ihdināṣ-ṣirāṭ al-mustaqīm.
Ṣirāṭ alladhīna anᶜamta ᶜalayhīm
Ghayril-maghḍūbi ᶜalayhīm wa lāḍ-ḍālīn.
Āmīn.

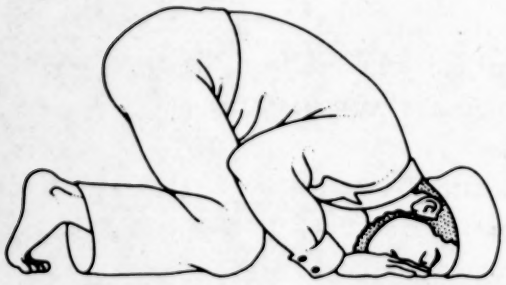
(In the Name of Allah, the Beneficent,
the Merciful.
All praise be to Allah, Lord of the Worlds.
The Beneficent, the Merciful.
Master of the Day of Judgment.
Thee only do we worship.
Thee alone we ask for help.
Show us the straight path.
The path of those whom You love and favor,
Not the path of those who have earned
Thine anger, nor are leading astray.
Be it so.)

Place hands, right over left, just below navel.

Following these words, a short chapter of at least three verses should be recited from the Holy Qur'an (see Appendix II for suitable examples).

Beneficial Effects: Extends concentration, causes further relaxation of legs and back, generates feelings of humility, modesty, and piety. In the recital of the above verses, virtually all of the sounds that occur in Arabic are uttered, stimulating dispersal of all of the ninety-nine divine attributes in perfectly controlled degrees throughout the body, mind, and soul. The sound vibrations of the long vowels ā, ī, and ū stimulate the heart, thyroid, pineal gland, pituitary, adrenal glands, and lungs, purifying and uplifting them all.

POSTURE 5



Name: Sajdah
Duration: 12 seconds
Recitation:
Subḥāna Rabbī al-ᶜAlā
Subḥāna Rabbī al-ᶜAlā
Subḥāna Rabbī al-ᶜlā

(Glory be to my Lord,
the Most Supreme)

Place both hands on knees and lower yourself slowly and easily into a kneeling position. Then touch the head and hands to the ground. The following seven body parts should be in contact with the ground: forehead, two palms, two knees, toes of both feet. The end position of this posture is given below.

Beneficial Effects: Knees forming a right angle allow stomach muscles to develop and prevents growth of flabbiness in midsection. Increases flow of blood into upper regions of body, especially the head (including eyes, ears, and nose) and lungs; allows mental toxins to be cleansed by blood. Maintains proper position of fetus in pregnant women. Reduces high blood pressure. Increases elasticity of joints. Annihilates egotism and vanity. Increases patience and reliance upon God. Increases spiritual stations and produces high psychic energy throughout body. This posture of supreme submission and humility is the essence of worship.

POSTURE 6

Name: Quᶜūd
Duration: 6 seconds
Recitation: At end of 6 seconds, recite
Allāhu akbar *and*
repeat actions of
Position 5 exactly.

Reciting *Allāhu akbar*, rise from Position 5 and assume the sitting posture shown here.

Beneficial Effects: For men, the heel of the right foot is curled up and the weight of the leg and part of the body rests upon it. This aids detoxification of the liver and stimulates peristaltic action of the large intestine. Women keep both feet, soles up, underneath their bodies. The body returns to even greater relaxation, and the posture assists digestion by forcing the contents of the stomach downward.

POSTURE 3

Name: Rukuᶜ
Duration: 12 seconds
Recitation: While bending at the waist, recite Allāhu akbar, *then:*
Subḥāna Rabbī al-ᶜAẓim
Subḥāna Rabbī al-ᶜAẓim
Subḥāna Rabbī al-ᶜAẓim

(Holy is my Lord, the Magnificent)

Bend at waist, placing palms on knees with fingers spread. Back is parallel to ground, such that if a glass of water were on the back, it would not spill. Eyes are looking down, directly ahead. Do not bend the knees.

Beneficial Effects: Fully stretches the muscles of the lower back, thighs, and calves. Blood is pumped into upper torso. Tones muscles of stomach, abdomen, and kidneys. Over time, this posture improves the personality, generating sweet kindness and inner harmony.

POSTURE 4

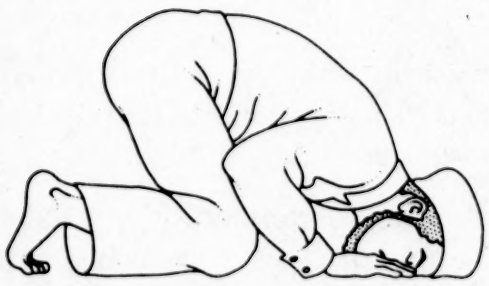
Name: Qauma
Duration: 6 seconds
Recitation: After holding for six seconds, say:
Allāhu akbar
and move to next position.

While rising from the bending position of *rukuᶜ*, recite *Samiᶜa Llāhu li-man ḥamidah. Rabbanā wa lakal-ḥamd* (Allah hears the one who praises Him; Our Lord, Yours is the praise). Then return to standing position, arms at side.

Beneficial Effects: The fresh blood moved up into torso in previous posture returns to its original state, carrying away toxins. Body regains relaxation and releases tension.

POSTURE 7

Repeat motions of Posture 5 exactly. Then, reciting Allāhu akbar, *return to sitting as in Posture 6.*



Beneficial Effects: Repetition of the deep prostration within a few seconds cleanses the respiratory, circulatory, and nervous systems. Gives experience of lightness of body and emotional happiness. Oxygenation of entire body is accomplished. Balances sympathetic and parasympathetic nervous systems.

POSTURE 8

From Posture 5, with head in prostration, lift the head away from the floor and bring the torso backward. Placing hands on knees, reverse the procedure for going down, and, while again reciting *Allāhu akbar*, return to the standing position. This completes one *raᶜkat* of prayer.

illustrations by Angela Werneke

The *salat* is done in either two, three, or four *ra'kats*, according to the time of day:

Fajr: 2 ra'kats
Zuhr: 4 ra'kats
'Asr: 4 ra'kats
Maghrib: 3 ra'kats
Isha: 4 ra'kats

Another interesting feature of the *salat* is that in the course of assuming three main positions (*qiyam, ruku',* and *sajdah*), one makes the physical shapes of the Arabic letters *alif, dal,* and *mim*. These letters spell the word *Adam,* the name of the first created human and the first prophet (a.s.).

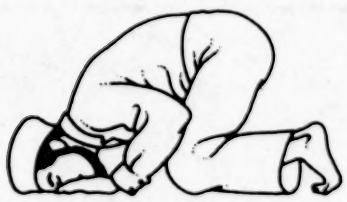
Salat postures corresponding to the word Adam

Posture of Qauma

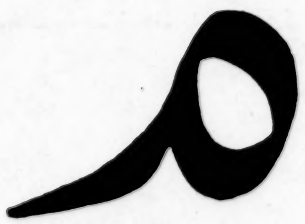
Letter Alif (A)

Posture of Ruku

Letter Dal (D)



Posture of Sajdah



Letter Mim (M)

Another important point regarding this practice, simply as a physical activity, is that persons of all ages can do it. It is smooth, flowing, and easy, and in time becomes the greatest physical development that is possible.

In the course of one day, the minimum performance consists of seventeen units of prayer, composed of nineteen separate positions during each ra'kat. This is a total of 119 physical postures per day, or 3,570 postures monthly, or 42,840 postures yearly.

In the average adult lifetime of forty years, 1,713,600 postures are performed. Anyone so doing is protected and inoculated against a host of ailments and diseases, such as heart attack and other cardiac problems; emphysema; arthritis; bladder, kidney, and bowel problems; viral and bacterial infections; eye diseases; loss of memory and senility; sciatica and spinal ailments; and many, many others. This practice can be done virtually anywhere, requires no special equipment, and costs nothing at all. ■

From The Book of Sufi Healing, *published by Inner Traditions Int., Ltd. (New York). Reprinted with permission of the publisher.*
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Islam: A Primer
• Understanding Islam

JAY KINNEY: These two books represent the long and short of it, as far as Islam is concerned. ***Islam: A Primer*** *provides a succinct summing up of the basic beliefs, history, and idiosyncracies of Islam. John Sabini writes with both clarity and sympathy — making this a painless introduction to a complex subject. The six-page glossary at the end is particularly helpful.*

Frithjof Schuon's ***Understanding Islam****, on the other hand, delves into the depths of Islam — at times so densely that I found myself chewing on the text a sentence at a time. Schuon, a Swiss convert to Islam, doesn't hesitate to draw parallels between Islam and other faiths, particularly Hinduism. He also takes the reader into the esoteric (or inner) essence of Islam where traditions and laws are given unexpected twists. If you have ever had any doubts about Islam being a satisfying framework for intellectual inquiry this book should lay them to rest.*

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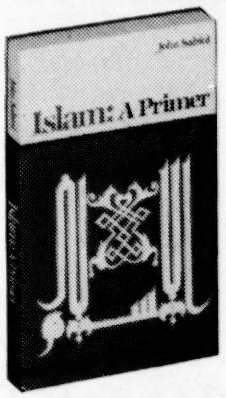
The most highly developed form of Islamic thought is the Law. Under Islam the Law is of divine origin, transmitted from God through Muhammad. It recognizes no difference between the religious and the secular and governs every aspect of the believer's life. Consequently, the most acute and creative minds in the Muslim world have been devoted to elaborating the basic Law, as expounded in the Quran and the Hadith, into a structure of intricate and harmonious design. The central role of the Holy Law of Islam is summed up in the Arabic name for it, *Shari'a*, "the path to the watering place."

The Shari'a, in theory, is infallible and immutable doctrine regulating the whole of the religious, political, social and private life of believers and to a certain extent of non-believers living under Muslim rule. Its provisions cover a wide ground, including criminal law, oaths, contracts, evidence, judicial procedure, marriage, the family, inheritance, slavery, education, personal hygiene, killing of animals, even manners and deportment.

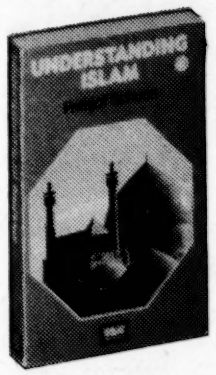
According to Sunna Islam there are four sources of Shari'a. First and foremost comes the Quran, the word of God. Second comes the Hadith, or traditions of the Prophet. Where these two sources are silent, Shari'a is derived from two human sources. *Ijma'*, or consensus, is sanctioned by a hadith of Muhammad's saying that his community would not agree to error. In practice ijma' is the consensus not of the entire community but of the *ulama*, those learned in religion and the Law. *Qiyas* (analogy), the deduction of legal prescriptions from the Quran and the Hadith by reasoning from parallel cases, covers situations not treated in the Quran or by the Prophet. It is the last resort based on the intellect of man, a weak instrument compared to the word of God and the example of the Prophet. Together, ijma' and qiyas cover situations untreated in the Quran and the traditions of the Prophet.

•

The *Wahhabis* adhere more strictly to the fundamental beliefs and practices of Islam than other Muslims. The movement was founded in the mid-18th century in the heart of Arabia by Muhammad ibn Abd al-Wahhab, a teacher who had traveled and studied widely in Iraq and Iran, as well as in Arabia. He condemned much of what he saw in contemporary Islam as 'polytheism' (especially the worship of local saints) and called on his followers to return to the traditions of early Islam. The Wahhabis call themselves *muwahhidun* ("Unitarian") and belong to the conservative Hanbali School of Law. Allied with the House of Sa'ud, they gained control of most of Arabia in the early 19th century. After a period



Islam: A Primer
John Sabini
1983; 127 pp.
$7.50
($8.50 postpaid) from:
Middle East
Editorial Associates
1100 17th Street NW,
Suite 300
Washington D.C. 20036



Understanding Islam
Frithjof Schuon
1981; 159 pp.
$5.95
($7.45 postpaid) from:
Allen & Unwin
8 Winchester Place
Winchester, MA 01890

of temporary decline under the Ottomans, the Wahhabis re-emerged in the 20th century under Ibn Sa'ud, the founder of Saudi Arabia. Their conservative interpretation of Islamic doctrine governs that state today.

—*Islam: A Primer*

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One reason why Western people have difficulty in appreciating the Quran and have even many times questioned whether this book does contain the premises of a spiritual life lies in the fact that they look in a text for a meaning that is fully expressed and immediately intelligible, whereas Semites, and Eastern peoples in general, are lovers of verbal symbolism and read 'in depth'. The revealed phrase is for them an array of symbols from which more and more flashes of light shoot forth the further the reader penetrates into the spiritual geometry of the words: the words are reference points for a doctrine that is inexhaustible; the implicit meaning is everything, and the obscurities of the literal meaning are so many veils marking the majesty of the content.

•

Islam arose from nature; the Sufis return to it, and this is one of the meanings of the *hadith*: 'Islam began in exile and it will end in exile.' Towns, with their tendency to petrifaction and their seeds of corruption, are opposed to nature, which is ever virginal; their sole justification and the sole guarantee of their stability is to be sanctuaries; this guarantee is quite relative, for the Quran says: 'And there is no town that We (Allah) will not destroy, or will not severely punish, before the day of resurrection' (XVII, 60). All this enables us to understand why Islam sought, within the framework of an inevitable sedentarism, to maintain the spirit of nomadism; Moslem cities always retain the imprint of a journeying through space and time; everywhere Islam preserves the sacred sterility and austerity of the desert, but also, within this climate of death, the gay and precious overflowing of springs and of oases; the fragile grace of the mosques echoes the grace of the palm groves while the whiteness and monotony of the towns reflects the beauty of the desert and so also of sepulchres. Beneath the emptiness of existence and behind its mirages lies the eternal profusion of Divine Life.

—*Understanding Islam*

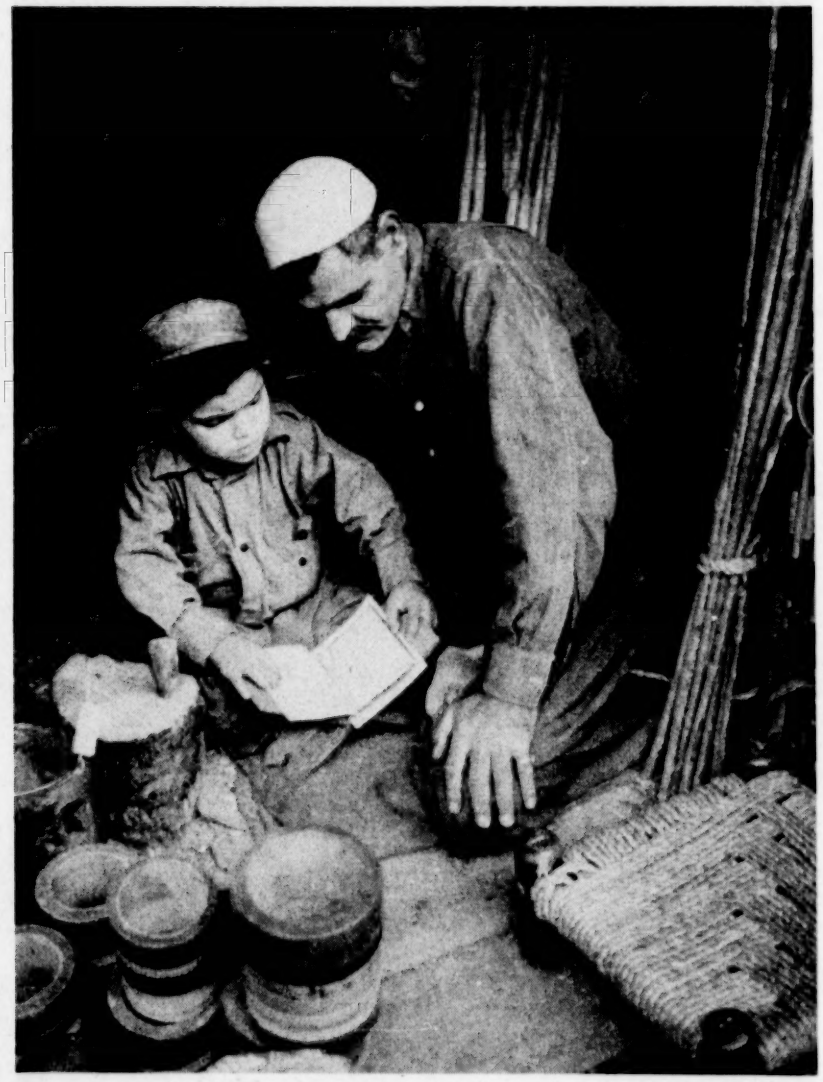
Whether you can get far into the Qur'an depends a lot on which translation you have at hand. Having found the commonly available Pickthall translation off-putting, I was quite surprised — and gratified — to discover the A. Yusuf Ali interpretation where nearly every verse has illuminating commentary appended to it. Here's a brief guide to five of the English-language Qur'ans most favored by American Muslims.

Latifa and Micha 'Abd al-Hayy Weinman come from quite different backgrounds, Latifa from a Protestant American upbringing and Micha from a nonreligious, Jewish Israeli family. They met at the Lama Foundation in New Mexico, where Micha was Director of Intensive Studies and Latifa was the Foundation's Secretary. Both are now Muslims. They presently live in Taos, New Mexico, where they run businesses devoted to alternative energy systems and repairing sewing machines.

—Jay Kinney

ACCESS TO THE QUR'AN

by Latifa and Micha 'Abd al-Hayy Weinman



Kevin Kelly

A woodworker and his son study the Qur'an together in the guild craft area, Peshawar, Pakistan, 1978.

THE QUR'AN Is The Book revealed from Allah (God) through His prophet Muhammad (on whom be blessings and peace!) over a period of 23 years. Unlike the Torah, the Psalms or the Gospels, it has been handed down unchanged since the time of its revelation. Consequently, its text has not been "improved," "clarified" or "interpreted." It remains exactly what Muhammad (who was illiterate) recited to the early Muslims.

As the Qur'an itself states, it is a book of guidance "to those who guard against evil, who believe in the Unseen" and like any book of guidance, it must be approached with respect and openness. This can be difficult for non-Muslims since the Qur'an abounds with images and thoughts that are both sublime, inspiring and beautiful, as well as (often simultaneously) mystifying, violent and terrifying. On first reading, it may strike you as a very peculiar and upsetting — yet compelling — book. Second readings and beyond get even more interesting.

Ideally, the Qur'an should be read or listened to in the original Arabic, as it was revealed, for there is much beauty and even greater emotional and spiritual power in its sounds. However, Arabic is a difficult language to learn, so most of us will have to settle, initially at least, for translations.

The translations listed here are available and are generally acceptable to Muslims. If you go deeply into reading Qur'an, you may wish to compare several translations for fuller sense of meaning. Do remember that *all* translations involve interpretation. Editions with footnotes may be helpful; but all footnotes, no matter how scholarly or poetic, should be taken with a large grain of salt. Draw your own conclusions, or better yet tolerate some ambiguity and confusion in the hope that eventually some real understanding may come to you.

Classical Qur'anic Arabic contains may ellipticisms (*ijaz* in Arabic); these intermediate thought associations, skipped over and lacking in the Arabic, are often supplied — usually in parentheses — by translators. Although there is common agreement on many of them, be aware that they do not exist in the revealed recitation and interpretations may creep in when they are filled in for you. All editions listed here follow the traditional arrangement of *suras* (chapters) by descending length, ordered with the longest first and shortest last.

A fine point: The name "Allah" is a sound, not a concept, and a great deal is lost in translating it as "God." The best arrangement would be an English translation including the name in Arabic الله

But since this has not been done, I encourage you to read the name Allah (pronounced ul-LAAH) whenever the name Allah or God occurs in your text.

Lastly, some Qur'an translations have the original Arabic along with the English. There is a subtle blessing just in having the Arabic in your possession, even if you can't read more than the word الله .

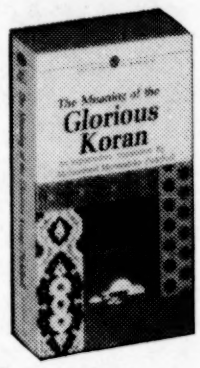
The Meaning of the Glorious Koran

Author Marmaduke Pickthall was an English convert to Islam. He retains the name Allah in his translation because he feels there is no equivalent in English, and his version is well balanced between dignified language and archaisms. Some feel that this is the best and most accurate English translation. Both the brief introduction and the short introductions to the suras are historically based and do not get into elaboration or speculation (his restraint is admirable and refreshing). Footnotes are minimal and mainly historical. The index is very basic (six pages). The paperback edition is compact, including only the English. If your local bookstore has any Qur'an, it is likely to be this one.

•

The Beneficient
Revealed at Mecca
In the name of Allah, the Beneficient, the Merciful.
1. The Beneficient
2. Hath made known the Qur'an.
3. He hath created man.
4. He hath taught him utterance.
5. The sun and the moon are made punctual.
6. The stars and the trees adore.
7. And the sky He hath uplifted; and He hath set the measure.
8. That ye exceed not the measure,
9. But observe the measure strictly, nor fall short thereof.

The Meaning of the Glorious Koran
Mohammed Marmaduke Pickthall
450 pp.
$4.50
($6.00 postpaid) from:
Mentor Books
New American Library
120 Woodbine Street
Bergenfield, NJ 07621

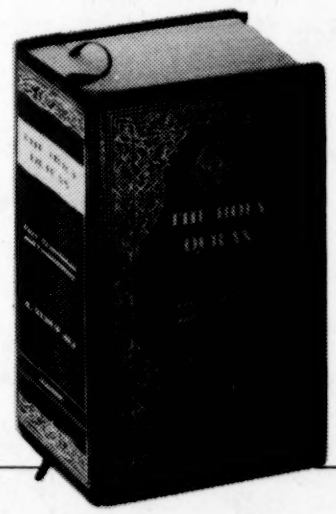


The Holy Qur'an

Though this translation is available in several editions from different publishers, the edition reviewed here is one of the best. It includes extensive footnotes and commentary which are quite helpful and insightful. The translation provides the Arabic and English texts side by side, and substitutes "God" for "Allah." Translated by a Pakistani Muslim, the language tends to be stilted, flowery, and archaic.

•

Sura LV.
Rahman, or (God) Most Gracious.
In the name of God, Most Gracious, Most Merciful.
1. (God) Most Gracious!
2. It is He Who has
   Taught the Qur-an.
3. He has created man:
4. He has taught him speech
   (And Intelligence).
5. The sun and the moon
   Follow courses (exactly) computated;
6. And the herbs and the trees —
   Both (alike) bow in adoration.
7. And the Firmament has He
   Raised High, and He has set up
   The Balance (of Justice),
8. In order that ye may
   Not transgress (due) balance.
9. So establish weight with justice
   And fall not short
   In the balance.



The Holy Qur'an
Abdullah Yusuf Ali
1983; 1861 pp.
$20
($21.00 postpaid) from:
International
Book Center
P. O. Box 295
Troy, MI 48099

The Message of the Qur'an

Muhammad Asad was an Austrian who converted to Islam at an early age and produced many excellent books about Islam. His intention in this translation was to make an "idiomatic, explanatory rendition." To this end, he has tried to convey the meaning of the Arabic of Muhammad's time in such a way that it retains its original meaning and is comprehensible to modern Westerners. His footnotes are extensive and extremely thought-provoking; in them he is less concerned with history and more with a verse's purport and inner relevance to the whole of the Qur'an's teaching. The actual translation becomes a little wordy and even dense as a result of this scrupulous attitude, but it helps to emphasize the depth and complexity of the Qur'an's message. Arabic and English, "Allah" translated as "God." No index, but interesting appendices such as "Symbolism and Allegory in the Qur'an." Not a lyrical rendering, but very enlightening.

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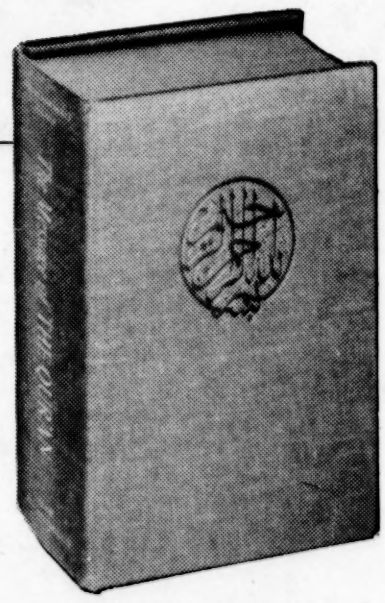
The Fifty-Fifth Surah
Ar-Rahman (the most gracious)
In the name of God, the most gracious, the dispenser of grace:
(1) The most gracious (2) has imparted this Qur'an [unto man].

The Message of the Qur'an
Muhammad Asad
1980; 998 pp.
$49.95
($54.95 postpaid) from:
New Era
Publications, Inc.
P. O. Box 8139
Ann Arbor, MI 48107



(3) He has created man: (4) He has imparted unto him articulate thought and speech.

(5) [At His behest] the sun and the moon run their appointed courses; (6) [before Him] prostrate themselves the stars and the trees.

(7) And the skies has He raised high, and has devised [for all things] a measure, (8) so that you [too, O men,] might never transgress the measure [of what is right]: (9) weigh, therefore, [your deeds] with equity, and cut not the measure short!

►

The Holy Qur'an

English and Arabic side by side. Translated by a Muslim from the Ahmadiyya sect — some footnotes show a rather biased interpretation of words and events. A lot of footnotes, some getting into detailed discussion of the Arabic. The language is clear and modern and easy to read (few haths or doths to stumble over). The introduction may tell you more than you wanted to know about the Qur'anic text and ideas. There is a good index, and the edition is nicely designed. This is a good, fairly compact Arabic-English version.

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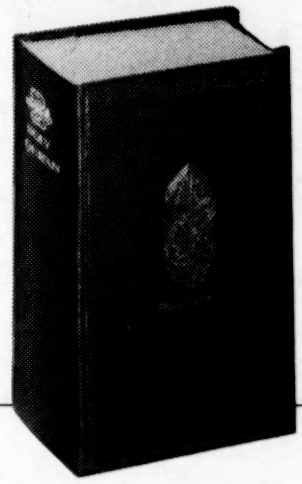
Chapter 55
Al-Rahman: The Beneficient

Section 1 Divine Beneficence

In the name of Allah, the Beneficent, the Merciful.
1. The Beneficent
2. Taught the Qur'an.
3. He created man,
4. Taught him expression.
5. The sun and moon follow a reckoning,
6. And the herbs and the trees adore (Him).
7. And the heaven, He raised it high, and He set up the measure,
8. That you may not exceed the measure,
9. And keep up the balance with equity, nor fall short in the measure.



The Holy Qur'an
Maulana Muhammad Ali
1985; 1256 pp.
$23.50
postpaid from:
Zafar Enterprises
36911 Walnut Street
Newark, CA 94560

The Koran Interpreted

Author Arthur J. Arberry was a great Orientalist but not — at least publicly — a Muslim (if this matters to you). He translates "Allah" as "God," provides a puny index and no footnotes — just a rather obscure 21-page preface. He doesn't give the Arabic titles of the suras, and he doesn't number every verse — making it difficult to cross-reference to other versions. Despite all these "failings," Arberry conveys some of the poetry, the cadence and grandeur of the Arabic. He has captured something ineffable from the original that none of these other translations have even touched (which is, nonetheless, far short of the actual Arabic).

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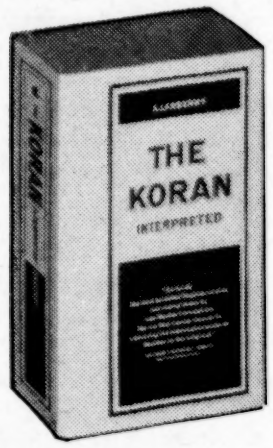
LV
The All-Merciful
In the Name of God, the Merciful, the Compassionate
The All-merciful has taught the Koran.
He created man
and He has taught him the Explanation.



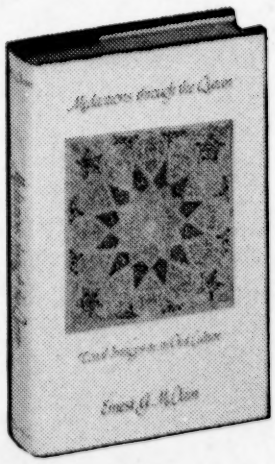
The Koran Interpreted
Arthur J. Arberry
1964; 358 pp.
$12.95
postpaid from:
The MacMillan Company
Front and Brown Streets
Riverside, NJ 08075
or Whole Earth Access

The sun and the moon to a reckoning,
and the stars and the trees bow themselves;
and heaven — He raised it up, and set
the Balance.
(Transgress not in the Balance,
and weigh with justice, and skimp not in the Balance.)

Meditations Through the Quran

JAY KINNEY: This is possibly the single most charming book on matters Islamic that I've run across. Ernest McClain's focus is on Islam — and particularly the Qur'an — as the last of mankind's great aural/oral religious traditions. As he notes, the spoken or recited verse can evoke feelings that elude the more sophisticated analysis of literary texts. This book is an attempt to reinvoke the context in which the utterances of the Qur'an were first heard. Along the way, McClain delves into the parallels between scripture and music on the one hand, and the Ka'ba and sacred geometry on the other. The result is an unassuming little volume which distills years of study into eminently palatable form.
[Suggested by Edmund Helminski]

Meditations Through the Quran
Ernest G. McClain
1981; 166 pp.
$12.95
($13.95 postpaid) from:
Samuel Weiser, Inc.
Attn: Order Department
Box 612
York Beach, ME 03910



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The tendency to subvert the poetic force of the Quranic vision by taking its statements as literal truth was present in Islam from the very beginning. While Muhammad lived, every rigidity was endangered by the possibility of a new revelation negating a previous one. Like any leader, he had to contend with the extreme conservatism of his own converts — until, that is, his untimely death only two years after conquering Mecca relieved them of having to worry about another visitation by Gabriel. The tension between a liberating poetic reading and an enslaving literal reading was never more apparent than it is today. Every ancient religion suffered this tension, every modern religion still suffers it, and in their own ways every modern traditional discipline also suffers a similar tension between what it assumes to be fact and what it must remember is only metaphor.

"Uttering a word," Wittgenstein writes, "is like sounding a tone on the keyboard of the imagination." That was how Gabriel's words affected Muhammad, and how Muhammad affected his auditors. Legalism came later. It requires no imagination: Indeed, it trembles before imagination: it has no ear for music. "*The limits of my language* means the limits of my world" to a musician-philosopher like Wittgenstein. Whoever reads the *Quran* without a musicalized, poetic imagination, trying to reduce it to the prosaic "legal" status of the factual kind appropriate for a mathematics textbook thereby radically diminishes his own world and falsifies Muhammad's.

Is it possible to create a modern economy that is not powered by the wealth derived from interest? The broad consequences of that question may be getting a trial run in a few Islamic countries today: Iran, Jordan, Sudan, Pakistan, and Egypt. A populist bunch of systems, all recent, some thorough and some running parallel with capitalistic banking, make results hard to discern. The theory is well presented here. —*Kevin Kelly*

AN ECONOMY WITHOUT INTEREST

Islamic Banking and Wealth

by Micha 'Abd al-Hayy Weinman

THE COMMAND TO GIVE in charity is one of the commands most repeated in the Qur'an. God is the Owner of all goods and wealth, and the rich man is His treasurer who distributes His bounty to the poor who are the receivers. These injunctions don't distinguish between material and spiritual wealth; it is all to be given in charity and moved about. Muhammad said that every act of kindness — even the giving of a smile — is charity.

Islam forbids taking or giving interest or taking part in any transaction that pertains to interest. As the Qur'an puts it, "And whatever you lay out at usury so that it may increase in the property of men, it increases not with Allah; and whatever you give in charity, desiring Allah's pleasure — these will increase manifold."

In fact, although to Westerners interest may seem neutral or even desirable, from an Islamic point of view any involvement with interest is a very grave offense against God, and money gained through interest is tainted money that cannot be used for any good purpose (especially not for charity).

The Arabic word for interest is *riba*, which connotes something that mounts or swells up, and the truest translation of this word is "usury." The essential characteristic of this kind of transaction is that one fixes a price on a loan that increases the amount owed — it "mounts up" over time, enslaving the unfortunate person who needed the loan in the first place.

While all forms of trade and merchandising (except in illicit goods) are permitted and even encouraged in Islam, any dealing in interest is strictly forbidden. The major difference between the two is that in trading, the trader risks his wealth while seeking increase; but interest involves no real work or risk, promises a fixed return to the lender and takes advantage of the inequality between those who have and those who have not. Worst of all, interest represents an attempt to deny that God decrees the outcome of all events: health and sickness, life and death, loss and gain.

God's command forbidding Muslims to deal in interest can also be seen as a continuation of God's laws given to His prophets in the Old and New Testaments. In fact, the word for interest or usury in Hebrew means "biting." Taking usury is like biting the flesh of another human being.

Yet loaning and borrowing money is a necessary and universal act. Islam deals with it in a way that differs from established Western banking practices.

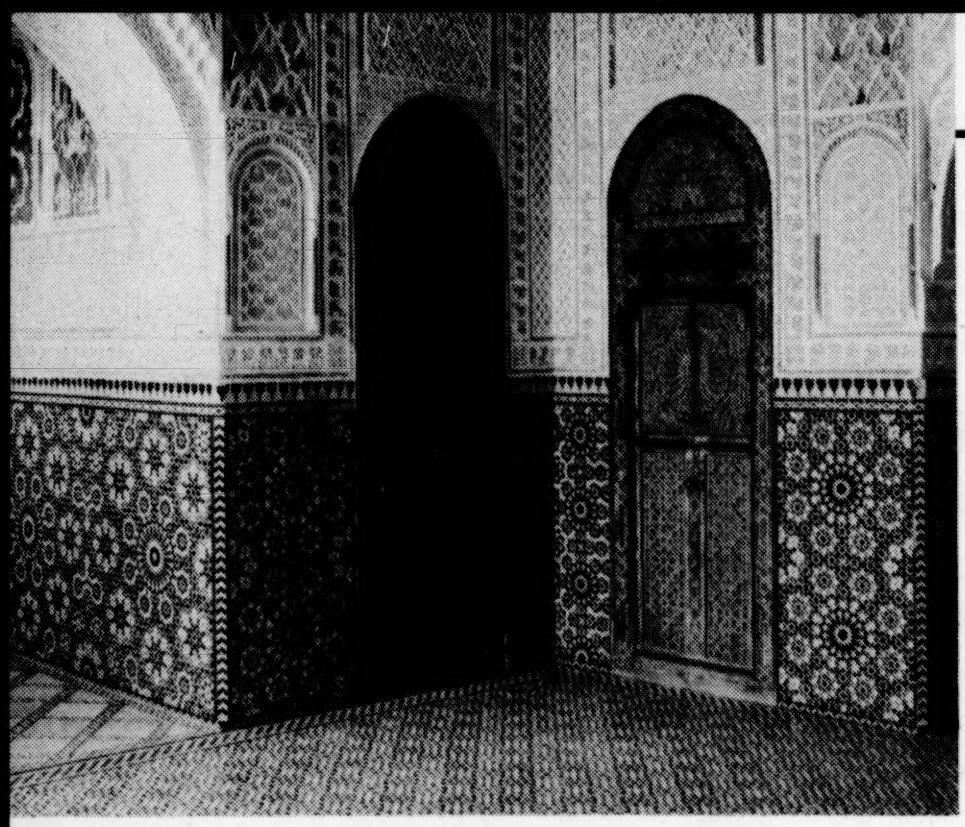
In Islam, the act of lending money is viewed as an act of charity and good will toward a brother in need. The benefit from this act is always seen as other than financial gain. The Qur'an recommends that lenders forget debts, cancel them, and declare them to be gifts, if there is difficulty for the one who owes the money.

The functioning of an Islamic bank produces a working relationship with the customer that is distinctly different from that in other systems. Obviously, a strictly Islamic bank can't be involved in any interest dealings of its own, or in the interest dealings of other financial institutions with which it is dealing or investing. For example, if a businessman needs a loan to expand his business, the bank takes the risk of gaining or losing by becoming a business partner with the client and investing its funds in his business in the hope of eventual return. A bank can similarly give a loan toward the purchase of an item such as a car or a house by actually buying the item and then reselling it for a higher price to be paid back in instalments. The bank must actually possess the item and then sell it, with the price to the buyer computed to give the bank its profit. To a certain extent, the bank can protect itself by putting mortgage arrangements into the exchange.

The essential element in this kind of transaction is a high level of trust, and a more equal sharing of risk between the two parties than is found in the West. This reflects an understanding of the brotherhood of Muslims. There is also the recognition of a large element of unpredictability and risk in all of life: that God is behind all actions and that however much and however well we plan, God is the best of planners.

These basic ideals guide a Muslim's relation to money and wealth. How these are actually put into practice is another matter. Very few Islamic societies strictly enforce these ideals. Many Islamic countries are becoming more Westernized and incorporating more capitalist methods. Muhammad warned that in later times interest would increasingly permeate the society and that almost everything would stink of usury.

Nonetheless, core beliefs of Islam remain that every soul must answer for what it does and that no soul can intercede in the judgement of another's deeds. Every Muslim must live according to the highest standards of Islam despite local and current conditions. This becomes a great duty and difficult test for western Muslims living within an economic system based on different values and assumptions. Perhaps, as the world sinks more and more into interest-created debt, it is not too farfetched to suggest that non-Muslims may find something to learn from Islamic principles of wealth. ■



Two small inside doors at the Royal Palace of Meknes. These doorways consist of two narrow doors which open from the middle in keeping with the style of larger palace doors.

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The composition of Moroccan art has specific characteristics. Originally Byzantine artists determined first of all the proportions of a work, then filled it with a composition designed as a function of the surface thus delimited, whereas the Islamic craftsman, possibly under Copic influence, created the idea of a continuous and infinite network to be used as need be, so that the pattern is often unexpectedly interrupted by the frame. *Decoration becomes a window upon a limitless world.*

Thus, the master pattern usually consists of the elaboration of a repeated motif and is not a composition of elements of different sizes and shapes within a definite frame.

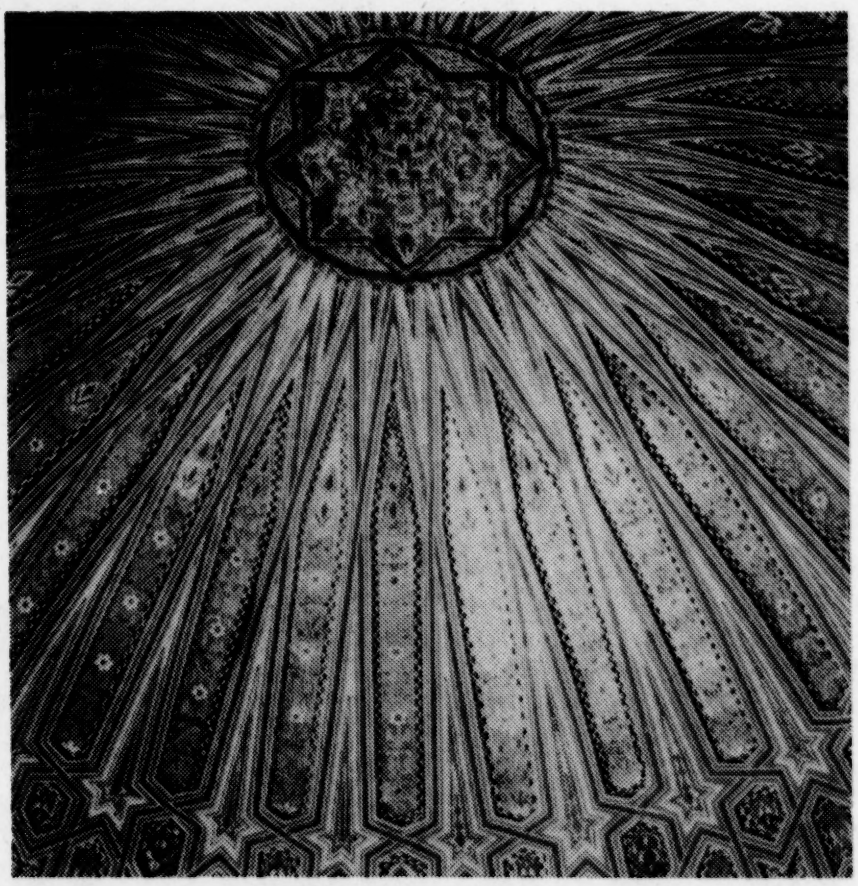
Traditional Islamic Craft in Moroccan Architecture

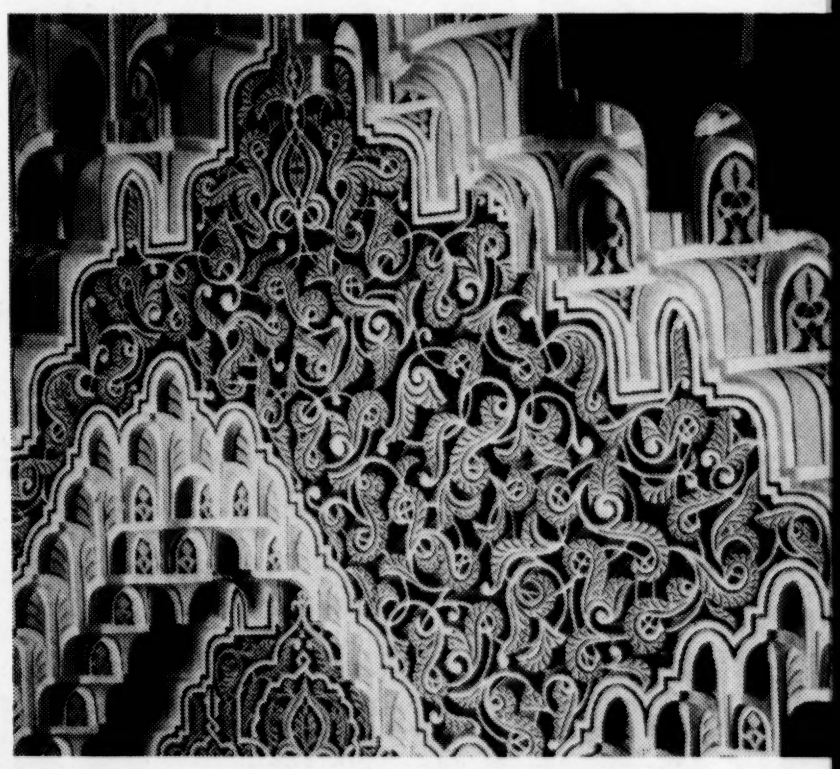
JAY KINNEY: How many times have you purchased a new tool or appliance only to find it broken after a short while? The decline in pride of workmanship is one of the common bugaboos of our time and is likely to be with us for some time to come. How pleasant, then, to find a two-book set that both embodies and describes attention to quality in copious mind-boggling detail.

The good news that Andre Paccard conveys in ***Traditional Islamic Craft in Moroccan Architecture*** *is that the masterful artisans of Islamic architecture and design are alive and well, producing exquisite work of a quality we might associate only with earlier centuries. Paccard was able to obtain permission to photograph many Moroccan buildings (palaces in particular) that are normally closed to visitors or the camera, and the splendid results are shown, in color, on over 1,000 pages. Paccard was also privy to the traditionally secret craft techniques passed down orally from master to apprentice, and some of these are presented here in text, diagrams, and photos.*

As an artist I've had reservations about the traditional prohibition of representational art under Islam. Eschewing the painting of the human figure out of fear of competing with Allah strikes me as a high price to pay for spiritual piety. Nevertheless, the dazzling work presented here is persuasive evidence that the creative impulse can flower under a variety of constraints, and that some of the most magnificent achievements of humanity have been produced as salutes to the Unity of Creation rather than as testimonials to the cleverness of the artist.

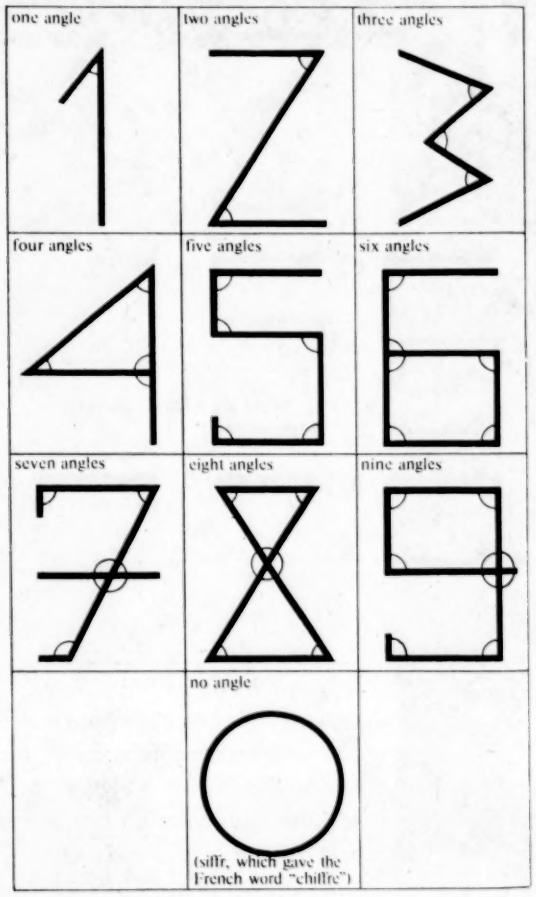
P.S. This is the most expensive item I've ever reviewed for Whole Earth and I don't do so lightly. In this case, however, the color printing, sewn bindings, place ribbons, cloth-bound covers — and above all, the inspiring beauty of the contents — justify the expense.



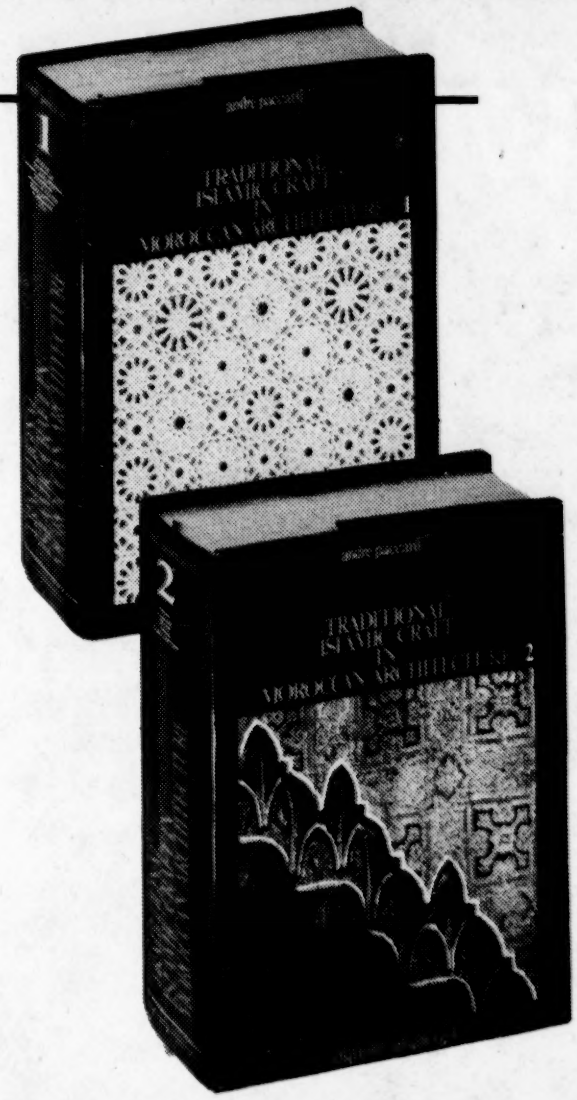


(above) Unlike plaster decoration in Europe, which is made in moulds, plaster in Morocco is worked by carvers on the spot. This portion of a half-cupola at Dar es Salaam in Rabat combines carved plaster in floral patterns with wood muqarnas which hang like stalactites.

(left) Ceiling at the Royal Palace of Marrakesh. A thirty-two-pointed star and filigree of ribs surround a "Solomon's seal."



This chart shows an interpretation of the origin of Arabic numerals, which were supposedly defined according to the number of their angles.



Traditional Islamic Craft in Moroccan Architecture
Andre Paccard
Two volumes
1980; 508 pp., 582 pp.
$250
postpaid from:
Editions Atelier 74
5 East 57th Street,
16th floor
New York, NY 10022

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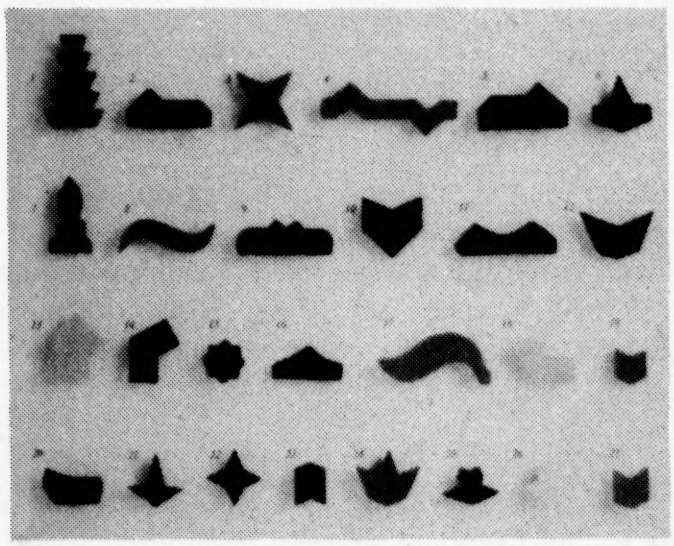
In a famous *hadith*, Al Bukhari said: *On the day of Resurrection, the most terrible of punishments shall be meted out to the painter who has imitated beings created by God, for God shall say to him: "Now endow these creatures with life."*

Thus we find in pictures figures whose necks have a black line drawn through them, to show that they could not possibly be alive, or others with shapes so monstrous and tormented that they could not possibly be resurrected.

These problems were such that Moslem thought became oriented toward the geometric. It became little by little the major art form of Islam, for the infinite lines reflect the indivisibility of God, the basis of the Moslem faith, and the complexity of the pattern conforms to the idea of the atomic structure of the universe.



(above) Examples of a few of the hundreds of zalij pieces (colored tile elements) which are cut out on the spot at construction sites and incorporated into vast mosaic friezes.

(right) Tile-setters at the Royal Palace of Marrakesh set, in reverse, a motif surrounding a twenty-four-pointed star.

WOMEN in ISLAM

by Latifa Weinman

photos by Joel Rubiner

As a total way of life, Islam provides guidance for both men and women. In this article, Latifa Weinman, an American Muslim woman, discusses the view from the inside. Latifa also collaborated on the "Access to the Qur'an" reviews on pages 22 — 24.

—Jay Kinney

(above) These three generations of women are members of an extended family in Jajouka, Northern Morocco. (next page) Women observe a musical ceremony for healing at the Shrine of Muslim saint Sidi Ahmed Shierk, in Jajouka, 1972.

IT PUZZLES ME, an American Muslim woman, that non-Muslims rarely ask me about my religious beliefs and practices. Instead I am invariably asked something like: "How could a modern American woman be a Muslim? Don't Muslims treat their women horribly?" Most Americans believe that Islam treats women as spiritual and intellectual second-class citizens and believe they are relegated to a life behind a veil in a secluded *harem*, denied all rights and education in a state of semislavery to their husbands.

It is difficult to counteract such stereotypes and to fully convey the many blessings Islam holds for women. Like having a baby, taking an acid trip, or riding a bicycle — it's difficult to describe to someone who hasn't tried it! It is also important to distinguish between what Islam legislates and teaches about the position of women in the Qur'an and Hadith (traditional sayings of the Prophet) and how women are actually treated in various times and places.

A Muslim woman is first and foremost a Muslim. The beliefs and practices of Islam are the core of her life. Islam, or surrender to Allah, means following as perfectly as possible the *din* or way of life outlined in the Qur'an and Hadith. As I

often explain it to children and to non-Muslims: "If *you* sincerely believed that God was telling you to do something — for example, to cover your head — wouldn't you DO it?" For a Muslim, it's almost that simple. Islam means surrender. Surrender is SURRENDER!

The Qur'an emphatically repeats that men and women are spiritually equal in the sight of Allah, and that their religious duties are the same. Except for specific exemptions for menstruation and for 40 days after childbirth, a Muslim woman prays at least five times a day every day of her life. She fasts during the month of Ramadan unless she is sick, on a journey, pregnant or nursing. Since she can own her own property (her husband cannot touch it without her consent), she must pay the obligatory *zakat* (the Islamic alms tax) on it if it is large enough. She should make the pilgrimage if she can.

Both men and women are encouraged to seek education and knowledge. They are both expected to hold to the moral virtues of purity, chastity and modesty. For women this means being fully covered when in public, except for face and hands, by clothes that do not reveal her figure. (Some also interpret this to mean that the face should be covered with a veil, but this is by no means a universally accepted interpretation or practice.) She may be less covered with her husband, children and near family. It is unthinkable for a Muslim woman to display her body to men other than her husband in the way that Western women now take for granted as "natural" or fashionable.

THE FAMILY and the raising of children occupies a central place in the moral and social legislation of Islam, and this is sometimes difficult for modern Westerners to understand and appreciate. It is from this concern for the stability and strength of the family that Islam creates different and complementary roles for men and women.

An example of this is in inheritance rights, which are distinctly spelled out in the Qur'an. Before Islam, women had no right of inheritance. Under Islam, they receive half the share of men. Taken out of context this certainly appears unfair! But in other verses of the Qur'an, men are clearly charged with the care and protection of women and children, and this can often apply to a very extended family. Having no such financial obligations, women are given the right to inherit, but inherit less.

Marriage is seen as an important part of Islam. Muhammad said that "marriage is half the religion." Families often seek to arrange a marriage for their daughter with a suitable man, but the woman must consent to it. A Muslim marriage involves a marriage contract between husband and wife, and the husband gives his wife a wedding gift (which is not a dowry or a bride-price) which she is entitled to keep as her own property.

A wife is expected to obey her husband in all decisions, although he may well consult her; he is the head of the family and his is the final word. She is expected to care for and guard his home and property. She may keep her maiden name and may seek employment in any suitable field (although this is generally discouraged since it is expected that the primary job of women is motherhood).

Mothers are honored and respected in Islam, and the extreme importance of their role in the family and society is recognized and praised. Generally it is seen that they should stay close to home, and in Islamic societies the extended family is the

major focus and world of most women. The family respects and cares for women in their old age.

Women in Islamic societies socialize with their family and with other women, and social events are not mixed affairs. It is difficult to express the kind of deep support and sisterhood among Muslim women. Much less energy is directed toward heterosexual romanticism, fantasy, and titillation than in Western culture, both within marriage and in general. Women's energy is channeled into raising children and making the home a place of harmony and spiritual values.

MOST NON-MUSLIMS assume that since polygamy is permitted in Islam it must be common, but it is in fact rare. The conditions that make it allowable (being able to treat more than one and up to four wives absolutely equally) are difficult for most men to meet. It is a provision, however, that may be socially necessary under certain circumstances such as an overpopulation of women (including many widows and unmarried women due to war) or when a wife is unable to bear children and children are very much desired.

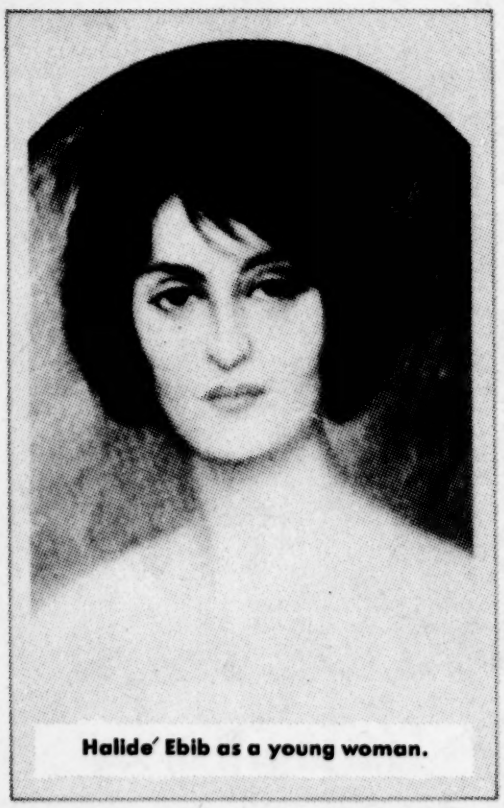
Similarly, although divorce is permitted and acknowledged to be sometimes necessary, it is discouraged and every effort is made to avoid it. Both Muslim men and women may initiate divorce, subject to restrictions of waiting periods specified in the Qur'an. Men are expected to support wife and children during the waiting period (a period of separation). Wives who initiate divorce frequently must give all or part of their marriage gift back as compensation. The men of the family support single unmarried women, widows, and orphans.

The above may sound like limitation and a loss of freedom to most Westerners. Yet most Muslim women, especially when looking at Western non-Muslim women, perceive these standards as a great blessing — an environment of protection, honor, respect and peace where women may concentrate on bringing up their children under pure, uncorrupted influences. From this point of view, many Western women appear to have the short end!

There is an inner freedom that can be experienced when we freely accept limits and discard the illusion of a freedom that is merely slavery to our own whims, desires, and fantasies. This is the crux of women's position in Islam. Certain rights are given; certain limits are set — but in the context of Allah's will. The benefit is not in the outward life, but in the possibility of the soul's evolution.

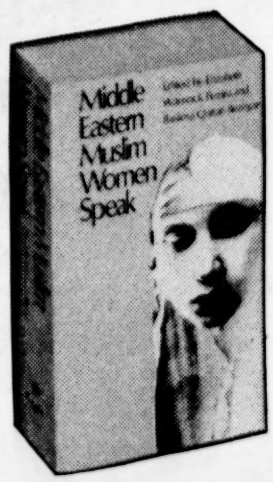
I know many American women who have lived as Muslims, some of them for very many years. Most of them are highly educated, widely experienced and certainly came to Islam from a very "liberated" past. Yet, I don't know of even one of them who would want to change from being Muslim or to return to her former way of life. And I believe that says a lot . . . . ■

Middle Eastern Muslim Women Speak



Halide' Ebib as a young woman.

Middle Eastern Muslim Women Speak
Elizabeth Warnock Fernea and Basima Qattan Bezirgan, Editors
1977; 400 pp.
$12.50
postpaid from:
University of Texas Press
Box 7819
Austin, TX 78713
or Whole Earth Access



JAY KINNEY: This anthology ranges from quotes from the Qur'an on women and biographical sketches of female mystics and poets to inverviews with modern feminists, fictional excerpts and autobiographical writings. What emerges is a multitextured picture of the lives of Muslim women in the Middle East. The book is attractively designed with photos and Arabic calligraphy throughout.

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Granny was living with me as usual, but I had lost the old sense of nearness to her for the moment. I was constantly out for lessons and lectures, the club demanded much of my time, and my circle of friends had had a great deal happen to it.

My writing I had to do after ten o'clock at night when the noisy little house slept and left me quiet in my room. Granny also enjoyed those quiet hours; she came to me for talks then. She was much shocked by the new women. Their talk, their walk, their dress, and their general aspect hurt her. She felt lonely, like a stranger in a world where she felt she had stayed too long, like a visitor who has outstayed his welcome; it was as if the newly arrived guests had taken all the room, and they looked ever so different from her. She suffered because they shook their arms as they walked, looked into men's eyes, had loud voices, and smoked in public; above all they did not iron their clothes as she did every morning. In spite of every difference we found certain inner contacts where we met on common ground and understood each other.

—Halide' Edib Adivar
Turkish Nationalist

THE CASE FOR COVERING UP:
AN IRANIAN DEFENSE OF *HIJAB*

IN THE WEST IF A MUSLIM woman is seen wearing *hijab* (modest dress), the first question that comes to the mind of western women is why is she covered?

If women living in western societies took an honest look at themselves, such a question would not arise. They are the slaves of appearance and the puppets of a male chauvinistic society. Every magazine and news medium (such as television and radio) tells them how they should look and behave. They should wear glamorous clothes and make themselves beautiful for strange men to gaze and gloat over them. A woman in the West is nothing more than a sexual object and is only there for the desires of men. The western women should realize this by just looking at the clothes that are designed for them to wear every year. They are not designed for practical use. Dresses that are skin-tight and have hardly any material to them are only to attract the male gender. Western women believe unless they dress like this, they will become spinsters and that no man will seek their acquaintance. They forget that they have a personality and a spiritual side to their lives.

There are groups in the West that are trying to liberate women from this way of life. They call themselves Women's Liberation Movements and advise women to compete with men, to behave like men, and to work like men in manual jobs. In every sense, it means that if women want to have equal rights in the West they must turn into men! They are forgetting that men are men and women are women. It is impossible for them to be the same physically or psychologically.

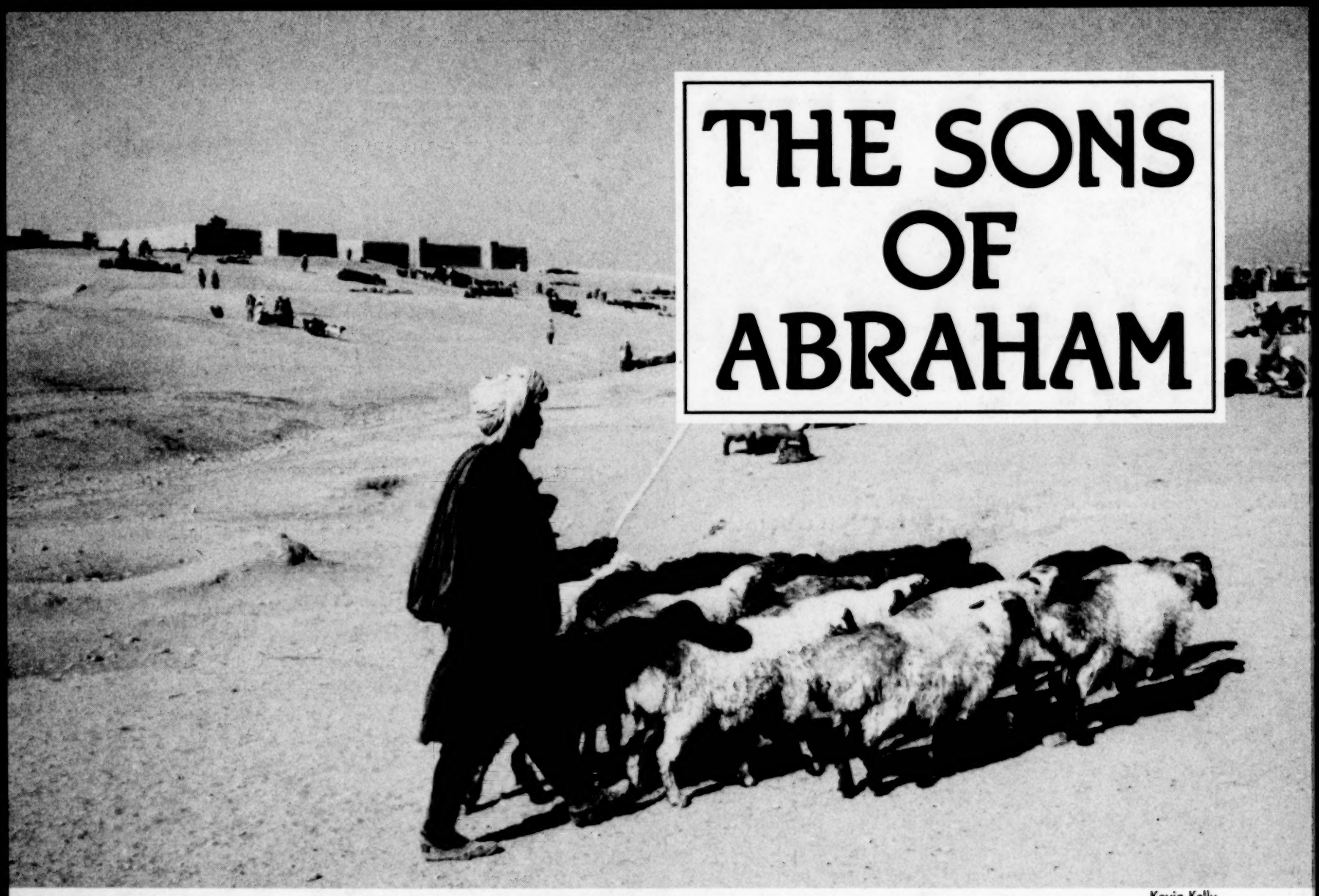
Islam looks at women with a different view. Women are equal with men but they are not the same as men; women have their rights as women and men have their rights as men. One is not superior to the other. So why do Muslim women cover themselves?

If one considers the physical aspects, one becomes aware that with regard to sexual feelings, men are much weaker than women. This does not mean that women are colder. It means that they are much stronger. Also, if one looks at how women are created, one realizes that they are more beautiful than men. In the other species of creation, the male is the more beautiful of the two.

So women who wear *hijab* do not wear it because they are weak. They wear it for they know the high status Allah has given them and they also wish to protect their society and stop the existence of immorality. They do not wish to be demoralized. *Hijab* for women is to achieve justice in society (Imam Khomeini). This does not mean that men should not dress modestly. The Qur'an states the responsibility of both men and women towards *hijab.* Sura Nisa. *Hijab* also must not just be an outer garment. It must be in the heart as well, because if one does not have inner *hijab,* then how can one sincerely portray outer *hijab?*

So the question is not why Muslim women wear *hijab,* but why the women in the West, who think they are so liberated, do not wear *hijab?* ■

Robert Horvitz discovered this item in the July 1984 issue of Mahjubah: The Magazine for Moslem Women, *an English-language journal published in Iran for foreign distribution. (For information, write: The Islamic Thought Foundation, P. O. Box 14155-3987, Tehran, Islamic Republic of Iran).* —*Jay Kinney*



THE SONS OF ABRAHAM

Kevin Kelly

by Ya'qub ibn Yusuf

The Arab/Israeli conflict as sibling rivalry.

Ya'qub ibn Yusuf lives in Winnipeg, Manitoba, where he helped found Prairie Sky Books, a spiritual bookstore, and Chautauqua Learning Community, a wholistic school. He was associated with Muslim Sheikh Muhammad al-Jamal of Jerusalem for seven years, and is presently pursuing the essence Sufi teachings of Murat Yagan. —Jay Kinney

THE FIRST PLACE THAT many of us in the West came upon an awareness of Islam was in the ongoing conflict between Arabs and the State of Israel. The enduring irony of this war is how much both sides share in common. Not only do they share a certain history and religious principles, but they share a common struggle — each side within itself — that is all too often projected outside onto the other. Both sides of the fence desire the best of the socialist and capitalist worlds, which often conflicts with the wish to preserve what is unique to their own worlds. On both sides, the desire for a unified society struggles against the richness of cultural diversity. And for Arabs and Israelis alike, the vision of a modern secular society is being challenged by those who see the fulfillment of their destiny in the return to their religious traditions.

For Jews and Christians, Israel is "the Holy Land." For Muslims, Jerusalem is simply "al Quds," "the Holy." The Temple Mount is a holy place for Muslims as well as for Jews, because, according to tradition, it is the touchstone from which Muhammad made his heavenly ascent to attain union with God. All this suggests the unity of a Prophetic Tradition which stands behind Judaism, Christianity and Islam. The tragedy is that the symbol of what all three hold in common should be the cause of contention.

In terms of theology, there is no contention between Judaism and Islam. Both have their objections to the Christian doctrine of the Trinity and the worship of Mary or Jesus Christ. Both affirm the Oneness of God and the humanity of the Prophets. In fact, from a theological point of view, Judaism and Islam resemble each other more closely than many Christian sects resemble each other. In their basic beliefs, they are virtually the same religion!

Yet, in both Judaism and Islam, belief itself is only the very beginning of religion. The heart of each faith is a concrete way of life involving a specific way of washing, of daily prayer, of eating and not eating, of giving to those in need and relating to

one's community. "The nation" or "the people" — be it "the Umma of Islam" or "Am Yisrael," is more than just the collectivity of believers. The community of believers has the role of making a bridge for the Will of God on earth.

What the Arabs object to in Israel may have less to do with her religion than with the fact that Israel is a full-blown western culture.

ISLAMIC nationhood, like American nationhood, is a kind of corporate identity that allows people to retain their ethnic backgrounds, as long as they give their highest loyalty to the whole. In its stated affirmation of the Prophets who went before, and its recognition that "among the Jews and Christians are (true) believers," Islam is a more universal religion than Judaism or Christianity. It is a coincidence of current social conditions that we find a liberal attitude more common today among Christians and Jews.

This was not always the case. Probably the highest civilization in the history of the Western world was the "Golden Age" of Muslim Spain in the 11th through 13th centuries, where the spiritual and natural sciences, including astronomy, astrology, medicine, philosophy, and architecture, were integrated in a wholistic understanding of mankind and the cosmos. It should come as no surprise, then, that this was also a civilization that hosted a cross-pollination and flowering of Jewish and Islamic literature and mysticism.

The burden of universalism is the claim to be comprehensive — whether in fact one has a view of the whole, or not. Thus there are built into the Islamic claim to encompass all other religions great possibilities for either open-mindedness or intolerance.

The Jews do not claim the universalism of the Muslims. It is not, "This is God's way for humanity," but, "This is God's way for us, as was indicated by our ancestors." Judaism is not a racist or racially based system; converts from outside the racial line are not generally invited, but have been accepted all the way back to the "mixed multitude" who left Egypt along with the 12 tribes of Jacob — and stood with them to make the Covenant of Israel at Mount Sinai. Judaism is most assuredly a tribal religion — most analogous, perhaps, to the religions of native American tribes who recognize the Great Spirit in common, but each follow their own particular "way." Actually, the name Judaism goes back to the tribe of Judah, which remained in the promised land and retained its religion after the northern tribes were exiled.

Judaism also differs from Islam in its acute historical sense. "Because of our sins we were exiled from our land," says the Hebrew prayer book. The Rabbis said further, "Israel is Israel, even though she has sinned." The dark memories of the past are retained along with the light. This may be egoism or it may be humility, but it is part of the sense of collective history and identity. It is no wonder that we find so many Jews among the founders of modern psychology, with its emphasis on facing and assimilating one's "dark side!"

This is something difficult for Muslims to accept. They look at the Scriptures of the Jews and find that these people admit to being so sinful! Even the Hebrew prophets and the figures the Muslims themselves admire, from Abraham to Moses to David and Solomon, appear more complex and imperfect in the Hebrew Scriptures. Perhaps it is because Islam stands as an ahistoric or timeless faith that it has this investment in being "right." Its Book comes out of the vision of the Prophet, rather than the ongoing experience of his people, so that all things not keeping to his standard can simply be rejected. The borders of the Umma (the "body of believers") of Islam, therefore, can extend very broad, or contract very small. One can always free oneself from embarassing things other Muslims have done by saying, "They're not true Muslims."

Thus, we could say that the point of unity for the Jews is a common sense of pride in "who we are and what we've been through," while for Arabs it is more likely to be a common prophetic outrage, a statement of "what we're against." We're speaking here of attitudes which tend to have a life of their own, independent of whether one practices one's religion.

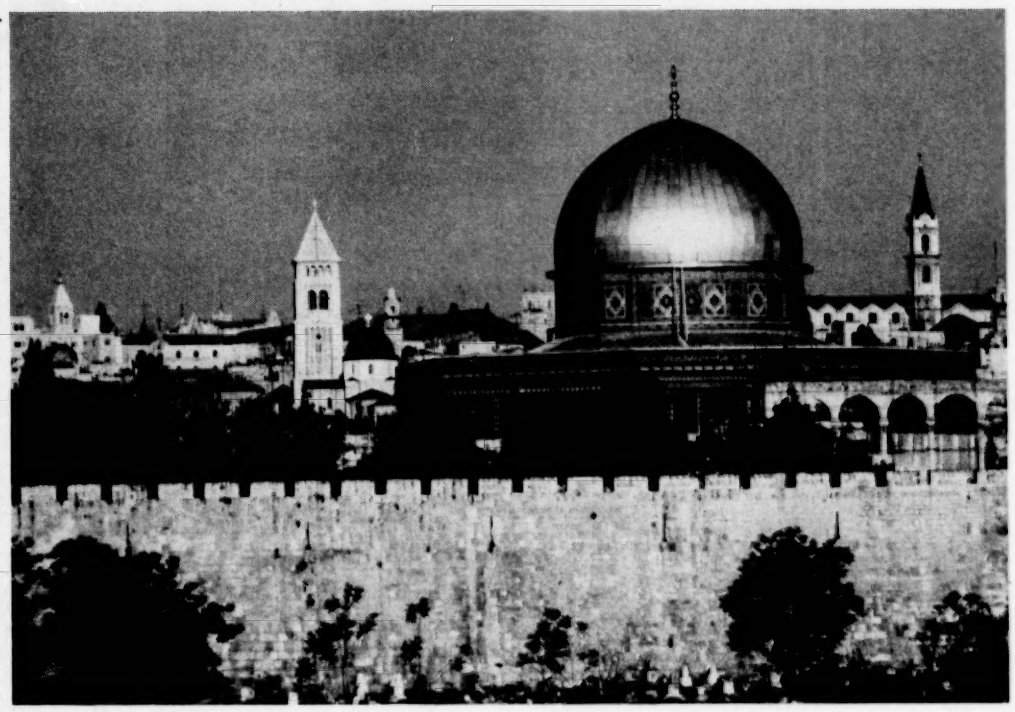
What the Arabs object to in Israel may actually have less to do with her religion than with the fact that Israel is a full-blown Western culture. Perhaps the most confusing and threatening element here, for all but the most Westernized of Arabs, is the relationship between the sexes in Israeli society. There is the relative equality of men and women in Israel, the casualness of Israeli women's dress, and the casual attitude concerning sex in some of the society. Of course it is easy to condemn Israelis for not keeping the moral and ritual requirements of their religion . . . but it still remains for Arab societies to work out their own adaptations to the modern world.

POLITICALLY, the main sources of Arab/Israeli estrangement are the competing claims of Palestinian and Jewish (Zionist) nationalism. What is ironic here is that the Palestinian movement owes its existence to the State of Israel. When Palestine was partitioned in 1948, and the Jewish State was attacked by all her Arab neighbors, none of them intended to establish an independent State for the Arab population of Palestine. From 1949 to 1967, the West Bank had simply been incorporated into Jordan. If Israel had not taken that land out of Jordanian hands, there would be no territory to contest.

The Palestinians are characteristically farmers, whereas Jordan's ruler King Hussein is "the Shepherd King," a friend of the bedouin. His father, King Abdullah, was installed by the British in Jordan as a kind of compensation for another aristocratic line, the House of Saud, being granted control of Arabia. The Palestinian Liberation Organization (PLO) has been persecuted in Jordan more vehemently than in Israel. In the end it may prove more possible to federate a Palestinian state with Israel than with Jordan. After all, the conflict between the Arabs and the Jews only goes back to Abraham's sons Isaac and Ishmael, according to the Bible. But the conflict between farmers and shepherds goes all the way back to the sons of Adam, Cain and Abel. The only conflict more ancient is the one between Adam and Eve!

Israeli author Amos Oz has described

Kevin Kelly



Haram al-Sharif, "the Sacred Place," the site of the Al-Aqsa Mosque and the Dome of the Rock in the Old City of Jerusalem. According to Islamic tradition, Muhammad ascended to Heaven from this spot. Some Jewish authorities hypothesize that the ancient Jewish Temple originally stood nearby.

the Palestinians as Israel's "shadow." Like the Israelis, the Palestinians argue among themselves about their identity. They utter many of the same slogans about "homeland" and the rights of "self-determination." They even accuse Israel of Nazi brutality — though inappropriately applying that nightmare to another time and place is something Jews do too.

It was against the PLO that Israel waged war in Lebanon in 1982. With peace initiated with Egypt, the Palestinian issue is now the major obstacle to completing the peace process. Israel's cry from the beginning has been, "Recognize me, and we can live together." Unfortunately, Palestinian leaders who echo similar sentiments are quickly discredited by their compatriots — if not murdered. Nor has the Israeli policy of settling "Judea and Samaria" been a support to Arab moderates. As long as the basis of agreement for Arab unity, and for the Palestinian cause, is that "the Jews have no right to be here," it is difficult for Israel to make herself the sponsor of an autonomous Arab State. But as nationalist movements mature, they advance from negative to positive definitions. It is time for us to hear from the Arabs of Israel about who they are, where they come from, and what sort of a society they wish to create.

Unfortunately, rather than the Palestinians becoming more like Israel in coming forward with a positive claim and vision, the Israelis are becoming more like Arabs with their unbudging insistence on a world made over in accordance with their vision. And in the face of the spiritual emptiness of the American and Soviet versions of the secular world, Jewish and Islamic (and Christian) fundamentalism are ready to fill the vacuum. These do not mix well with each other.

THE RABBINIC authorities in Israel and the Ulama (scriptural scholars) of Islam have a vested interest in keeping control of religion — even if it means alienating much of the population. Secular governments, either by resisting the religious establishment or making deals with them, may also have a role in keeping religion stagnant. In Sadat's Egypt, I am told, the works of the "Great Sheikh" of Sufism, Muhyiddin Ibn al 'Arabi, were banned. Within the State of Israel, the clergy of all kinds of Christian and Muslim denominations can perform weddings and funerals, but a Reform or Conservative Rabbi cannot.

The absorption of very black Jews from Ethiopia in Israel provides ample evidence that Zionism is not racism. But cultural imperialism is a more insidious disease. The insistence of the Rabbinic authorities that these Jews affirm Orthodox Judaism by accepting the ritual baptism was a way of discounting the version of Judaism that the Ethiopian Jews themselves have preserved over many centuries. Theirs is a Hebrew faith which predates the whole Rabbinic development. Perhaps there is a link in it to the original prophetic source.

But every time we mention "prophetic roots" or a "prophetic source," we are knocking on a door going back to Abraham. It is through Abraham and his son Ishmael that the Arabs feel an ancestral connection to monotheistic religion, which was restored for them as Arabs only with the message of Muhammad. It is through Abraham and Isaac and Jacob that Jews feel the ancestral promise of a destiny in the Holy Land. To what degree Jews or Arabs are in fact physical descendants of Abraham is not the issue. Clearly, both sides share the feeling that they are of his family: his spiritual heirs. But if one wishes to inherit in the line of Abraham, one must first seek out who he is, and what he means.

ALL THREE of our religions are based on the foundation Abraham provides. Moses, Jesus and Muhammad found a context for their experience and work in his already ancient example. But while Abraham is claimed by all our religious institutions, he himself rejected the various religions of his day. He was the original drop-out. Approximately 2,000 years before the Buddha, Abraham dropped out of society seeking the spiritual reality beyond the forms of this world. He is not only the prototype for the founders of the religions, but for our our lonely existential anti-heroes, as well.

Abraham left Ur of Chaldees, one of the only places of civilization in the world at that time, which was supported by the development of agricultural technology. He went back to the subsistence existence of the nomadic shepherd. Abraham felt compelled to leave all that security and sophistication behind to follow the Voice he heard calling him into the unknown.

Today, in the land promised to Abraham and his descendants, we find another sort of wilderness — one full of the manmade projections of those who claim the Abrahamic inheritance. In all of the noise and conflicting claims, it is easy to lose sight of our common origins. As we wander in this wilderness, can we still distinguish the Voice to which Abraham first responded? ■

Islam in the World

YA'QUB IBN YUSUF: Ruthven is a non-Muslim with a great respect for the original Light of Islam. He also has a healthy perspective on the various compromises that have been made between that Light and the social/political realities of the day. Ruthven details the social factors behind the Islamic revolution in Iran and the political factors in Egypt and Saudi Arabia's recent history. He also traces the evolution of the major schools of Islamic law. This book provides a bird's-eye view of everything you need to know — from the outside — to appreciate what's going on in the world of Islam.

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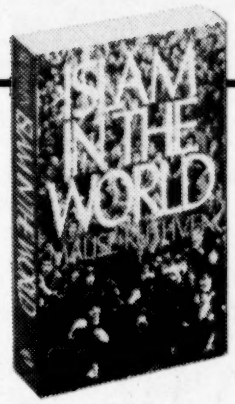
The process of islamization can be a highly complex one, involving as it does the gradual adoption of Islamic norms and outlook by people of widely differing cultures. In parts of West Africa the initiative came mainly from above. Muslim traders and marabouts who journeyed south of the Maghreb into what are now Mauritania, Mali and Nigeria, and into the riverine states of Senegal and the Volta, carried with them an aura of cultural prestige that commended them to the rulers of these territories. A king who protected Muslims or even converted to Islam became part of the international community, giving him considerable advantages over non-Muslim rivals. Literacy (in Arabic), the expansion of trade and even the opportunity to dispossess his non-Muslim neighbours by launching a *jihad* against them provided the inducements which made Islam an attractive 'royal cult' for many West African princelings. A successful *jihad* need not necessarily lead to mass conversions: Subject peoples might more usefully furnish slaves and booty whilst remaining *kafirs* without any rights. The cultural prestige associated with Islam was often expressed in terms of admiration for its superior magic. A green turban received from the Sharif of Mecca during attendance at the Hajj was a more impressive symbol of authority than any local tribal fetish.



Islam in the World
Malise Ruthven
1984; 400 pp.
$8.95 postpaid from:
Oxford University Press
1600 Pollitt Drive
Fair Lawn, NJ 07410

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For all its tradition of militancy in Central Asia and the Caucasus, the Naqshbandi (Sufi) order has survived in the Soviet Union precisely because it is well adapted to undertake 'underground' Islamic activity. Whereas the Qadiriya, the other leading order active in the Soviet Union, is liable to attract attention by its ecstatic rituals, the Naqshbandiya offers a form of private religious activity which successfully escapes official attention. As a whole the *tariqas* offer a 'parallel religion' to the official Islam backed by the Soviet authorities, with its carefully chosen, party-approved *mullahs* and licensed mosques. Since only the chosen few are given exit visas to attend the Hajj, local pilgrimages to saintly tombs are encouraged by the 'alternative' religious leadership as a way of keeping religion alive. Although the facts are necessarily hard to come by, there is evidence that 'alternative' or 'parallel' Islam is as alive in the Soviet Union as such 'unofficial' and heterodox versions of Christianity as Baptism and Pentecostalism. Thus, according to recent (1979) official figures, about half the 'believing' Muslims (estimated at between 50 and 60 per cent of the population) in the autonomous Caucasian republic of Chechens and Ingushes belong to the *tariqas*, giving the latter a membership of between 150,000 and 180,000 (compared with about 60,000 in the same territory before the Revolution). In Azerbaijan (1977) official Islam counted 16 mosques, compared with an estimated 300 clandestine ones.

Recognizing Islam

JAY KINNEY: Michael Gilsenan, an anthropologist associated with Oxford, has spent 20 years in the field in Egypt, Lebanon, and Morocco, noting the details of rural and village life. This book is a readable account of Islamic culture in all its contradictory variety, replete with anecdotes, historical references and critical analyses of the commonplace. The author pays special attention to the nuances of power, honor, and duty that permeate Arab/Islamic society, and which often lend quite different meanings to otherwise identical events. The result is a fascinating document that pulls Islam down from the realm of the exotic and ideal into the world of real people. Highly recommended.

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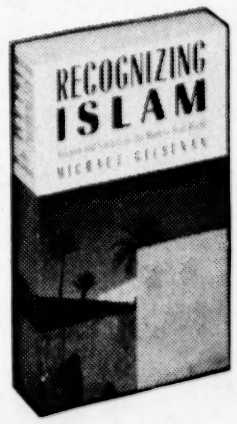
Take a very simple but absolutely crucial example. Women are the center of a family's sacred identity. For the males of the family the women are both the embodiment of purity and also a source of danger and defilement. Their sexuality, which their natures can never totally control, may bring dishonor and destruction unless father or husband or brother jealously guards the shrine. Women may only exist in the private domain, in socially closed space. They have no public and open life. They may only be legitimately seen by very specific categories of males, for contact with any others touches the sacred in the family.

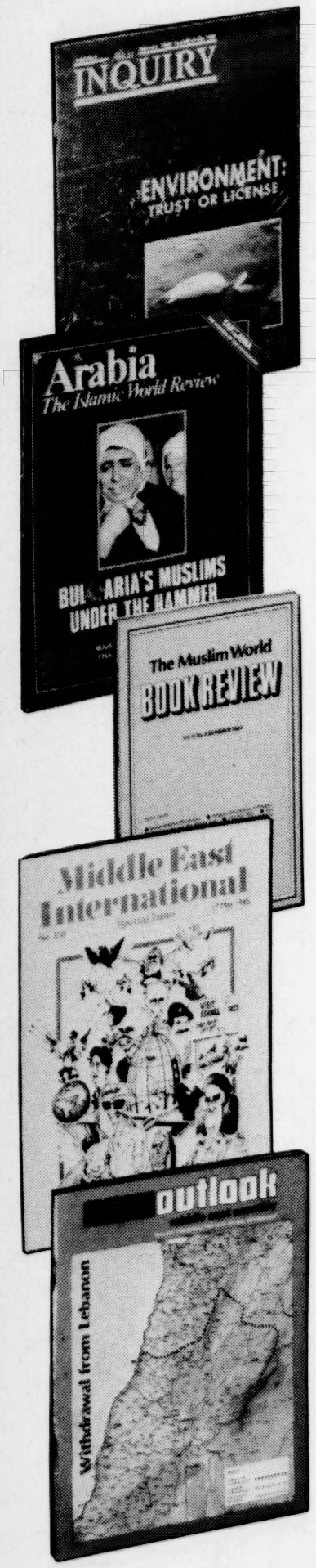
How, then do they cope with public space? The paths and narrow streets of the village are clearly more public and socially unrestricted than most other spaces, though they are still territorially defined and part of quarter or descent group's zone. Women, when they walk down such a path, are in the literal sense of the word visible. But they are not "seen." That is to say, the path itself has zones of open and closed. Men walk down the middle, women cling to the sides and walk fast. Neither gives any sign of seeing the other at all. The women are socially and for all practical purposes invisible. They must be. For to give any indication in front of witnesses always alive to the merest glance or flickering momentary look or flash of recognition is to change, possibly in the most dangerous ways, the nature of the moment. It may become socially defined as an encounter with possibly critical meanings if witnesses decide in turn to acknowledge that they have seen something, as distinct from tacitly colluding with the pretense that there was nothing to see.

In fact women engage in an enormous amount of visiting to and fro and are quite central in the exchange of information, arrangement of marriages, and so forth, but this is only possible because of the powerful convention, sanctioned ultimately by violence, that none "see" them. They are publicly "not there" *because* they are so significant.

Recognizing Islam
Michael Gilsenan
1982; 287 pp.
$7.95
($8.95 postpaid) from:
Pantheon Books
Random House
Attn: Order Department
400 Hahn Road
Westminster, MD 21157



MAGAZINES ON MUSLIMS & THE MIDDLE EAST



by Jay Kinney

ESTIMATES OF THE NUMBER OF MUSLIMS in the U.S. range anywhere from one million to four million people — certainly a sufficient audience for publications dealing with Islam and related topics. However, finding such magazines is no easy matter. Some of the following could only be found at a local Arab import shop, others only in university libraries, and some surfaced only through obscure ads in other obscure journals. This is unfortunate, because a perusal of these magazines can take one a long way toward seeing Islam with new eyes.

Note: "Middle Eastern" and "Muslim" are not synonymous — Arab Muslims are actually a minority among Muslims worldwide — but it is difficult to get a handle on one without delving into the other. The publications that follow are hardly an exhaustive list, but they do represent a reasonable starting point. Many of them are English — a legacy of England's heyday as a multicultural Empire and of the many Muslims living in the U.K. now.

If I had to restrict my recommendations here to only one magazine, it would undoubtedly be ***Inquiry****. Published in London, this "Magazine of Events and Ideas" is of unfailing interest month after month in its coverage of the intellectual ferment in the Islamic world. This is the place to find deep critiques of Modernization, High Technology, and Multinationals along with self-critiques of Muslim intellectuals' idealism.* ***Inquiry*** *also provides news of Islamic countries and reviews of books and cultural events.*

Arabia*, another monthly Muslim journal from England, provides more news coverage in a style closer to* Time *or* Newsweek*. It is particularly strong on coverage of Islamic politics and finance.* ***Arabia*** *seems to be aimed at a broader, non-Muslim readership than* ***Inquiry****, which may account for its more impersonal tone.*

Five years ago, the Islamic Foundation, an educational research organization in Leicester, England, initiated ***The Muslim World Book Review****, which runs plentiful reviews of both commercial and academic books on Islamic topics. Since the reviews are written by Muslims they often serve as a pointed commentary on the material that American and British publishers choose to print about the Muslim world. Though it's a tad expensive, it is the best place to go for a comprehensive rundown on such books.*

A final British magazine worth noting is ***Middle East International****. This fortnightly is especially strong on reports on local politics from correspondents in the Middle East. It also runs excerpts from the Arab and Israeli press.* ***MEI*** *avowedly champions the coexistence of Israeli and Palestinian states as the only credible way to forge peace in that troubled region.*

New Outlook*, a pro-peace Israeli magazine, takes much the same position, presenting news, commentary, and interviews aimed at strengthening Israeli-Palestinian dialog. Produced by participants in the Peace Now movement in Israel,* ***New Outlook*** *is a brave venture deserving a wider readership both here and in the Middle East.*

Rounding out coverage of the Middle East, two other magazines are worth investigating, ***MERIP Reports*** *and* ***American-Arab Affairs****. MERIP stands for Middle East Research and Information Project, a long-running lefty*

Inquiry
Mohamed Iqbal Asaria, Editor-in-Chief ☐ **$25**/year (12 issues) from: Inquiry, Tropvale Ltd., P. O. Box 177, Elmhurst, NY 11373.

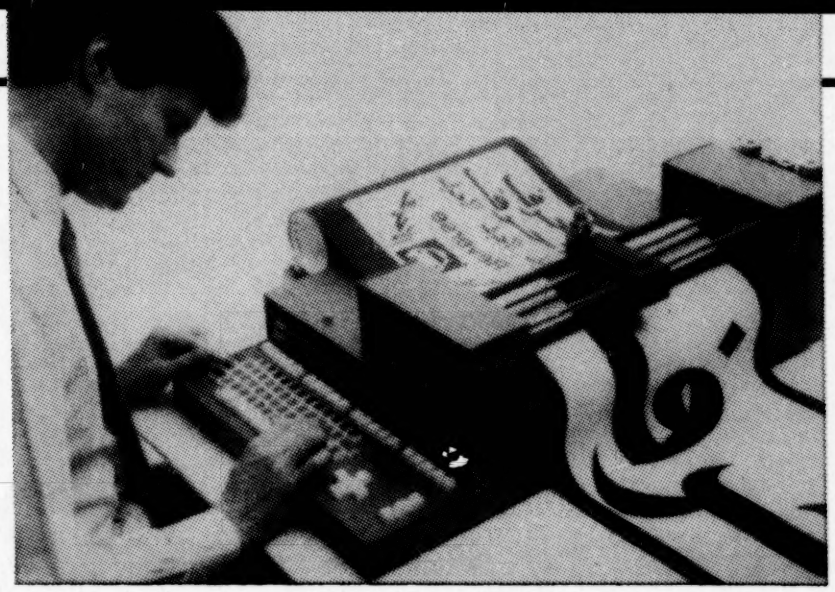
Arabia (The Islamic World Review)
Dr. Fathi Osman, Editor-in-Chief ☐ **$30**/year (12 issues) from: Arabia, Islamic Press Agency, P. O. Box 8139, Ann Arbor, MI 48107.

The Muslim World Book Review
Khurram Murad and Manazir Ahsan, Editors ☐ **$28**/year (4 issues) from: The Muslim World Book Review, Islamic Foundation, 223 London Road, Leicester, LE2 1ZE, England.

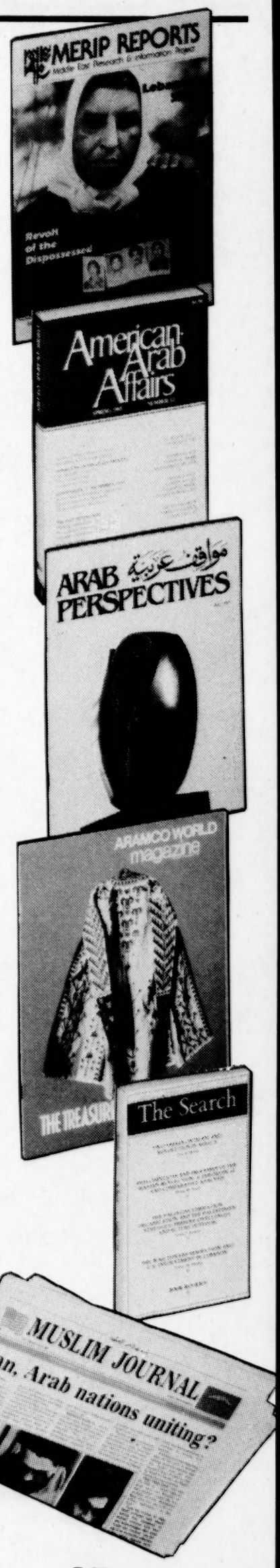
Middle East International
Michael Wall, Editor ☐ **$59**/year (25 issues) from: Middle East International, P. O. Box 53365, Temple Heights Station, Washington, DC 20009.

New Outlook (Middle East Monthly)
Chaim Shur, Editor-in-Chief ☐ **$41**/year (10 issues) from: New Outlook, Islam News Service, 295 Seventh Avenue, New York, NY 10001.

MERIP Reports
Joe Stork, Editor ☐ **$18**/year (9 issues) from: Merip Reports, Room 518, 475 Riverside Drive, New York, NY 10115.



The Graphix 4 computer from Spandex UK Limited is programmed to cut self-adhesive vinyl, silkscreen stencils, rubylith overlays and paper signs in Arabic and English. —Arabia, August 1985



source of documentation and analysis based in New York. Each issue of their magazine spotlights a different country or specific situation in the region, with particular attention to political and economic data.

***American-Arab Affairs**, published by the American-Arab Affairs Council, is a scholarly policy journal in much the same vein as* Foreign Affairs *or* World Policy Journal *but with a focus on American-Arab relations. The material presented here generally supports closer cooperation between the U.S. and Arab countries.*

*Another, more specifically Islamic scholarly journal is **The Search**, published by the Center for Arab & Islamic Studies in Brattleboro, Vermont. The majority of the contributors are Muslim academics at U.S. universities and the topics covered range from politics and economics to history and the Qur'an.*

***Arab Perspectives**, the monthly magazine published by the Arab Information Center of the League of Arab States, is probably the most overtly partisan publication surveyed here, but it is still well worth a look. In it you'll find Arab culture and political positions presented in a highly attractive manner. There is usually material in each issue in support of the Palestinians, reflecting the priority given them by the Arab states.*

***ARAMCO WORLD Magazine**, which originates from the Public Affairs department of the Saudi-owned oil company ARAMCO, is even more attractive; in fact it is probably one of the most beautifully printed magazines in the world. As might be expected of a corporate production, it generally sidesteps politics, preferring to run color photos and cultural and historical pieces on Arabic and Islamic subjects, which it does splendidly.*

*The **Muslim Journal** (formerly the **Bilalian News**) is the only weekly Muslim newspaper in America. It provides a readable introduction to the Islamic worldview as it has evolved in the U.S.*

World and domestic news share its pages with mini-sermons from W. Deen Muhammad and how-to columns for entrepreneurs. This is the most "grass-roots" publication of all those listed here and worth seeking out for insight into Islam as a growing American religion.

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*The best single source of mail-order books on Islam and the Middle East to come to our attention is Medialink International in Brooklyn, NY. Their 30-page catalog of books, records, and periodicals covers a couple of dozen subjects with plenty of books that are otherwise difficult to find. (**Traditional Islamic Craft in Moroccan Architecture**, reviewed on pages 26-27, is available from Medialink at a substantial discount.) Medialink also serves as subscription agent for several of the magazines reviewed here.* ■

American-Arab Affairs
Anne Joyce, Editor ☐ **$20**/year from: Circulation Dept., American-Arab Affairs, 1730 M Street NW, Suite 411, Washington, DC 20036.

Arab Perspectives
Dr. Marwan Al-Gharably, Publisher ☐ **$10**/year (12 issues) from: Arab Perspectives, 1100 17th Street NW, Suite 602, Washington, DC 20036.

ARAMCO WORLD
Paul F. Hoye, Editor ☐ **free** (6 issues/year) from: Aramco Services Company, Public Affairs Dept., P. O. Box 2106, Houston, TX 77252-2106.

The Search
Samir Abed-Rabbo, Editor ☐ **$15**/year (quarterly) from: The Search, P. O. Box 543, Brattleboro, VT 05301.

Muslim Journal
Munir Umrani, Editor ☐ **$20.85**/year (weekly) from: Muslim Journal, 7801 Cottage Grove, Chicago, IL 60619.

Medialink International
Catalog **free** from: 191 Atlantic Avenue, Brooklyn, NY 11201.

ATTENDING A RITUALISTIC DINNER

by Gulzar Haider

illustrated by Jay Kinney

IT IS A SATURDAY EVENING IN TORONTO, OTTAWA AND VANcouver. It could easily have been Chicago, New York or Houston. Pakistanis are dressed up to go to dinner parties hosted by those whom they suffered on previous weekends by inviting them. The accounting of dinners is flawlessly accurate.

Ladies look forward to these occasions. Children are either left behind or, if a bit older, want to stay behind. If dragged along in the hope they will meet their "Pakistani, Muslim brothers and sisters," they go reluctantly and manage to slip away from the company of adults to the furnished recreation rooms with TV and video games.

Gatherings are usually kept large. One can process more families in one go but, even more important, a large gathering ensures that nothing will ever get too serious. Mostly professionals, they cover a wide range of specialities: Physicians, statisticians, engineers, economists, professors and franchise owners, real estate brokers and even unemployed full-time thinkers. They came to North America in the '60s and most are now well settled in the sense that there is a pattern to their lives. Many, in addition to their jobs, are involved in investments and businesses, but hide such activities from each other. As you get to know them, you cannot help the feeling that this is a curious assortment of aging neurotics whose past is a painful memory however romantically expressed, whose present is comfortable and confused, whose future is a boundless haze.

The host's residence is expensive, with at least two garages; the furnishing is ostentatious, decor plush and eclectic, with a special garnish of Pakistani artifacts. As if to ward off the evil spirits, there is usually a multicolored and poorly produced plastic plaque with a picture of Makkah Al Mukkarimah. Those whose earnings have become far in excess of their needs feel compelled to flaunt these "blessings of Allah." Of course, how can they be thankless to Allah, who is perceived a full partner to increasing prices of real estate. Uniformed maids are now engaged for the evenings. Even the food is catered in some cases.

As the guests, arriving fashionably late, start settling down with their drinks, nonalcoholic of course, the conversations begin. After usual niceties and trivial comments about the weather, work and interest rates, a pattern starts developing and with amazing predictability, a series of topics emerge.

Someone takes a deep sigh and offers a comment on the latest political news from Pakistan. Suddenly but surely, a number of guests move closer to the edges of their seats. Cynical darts are thrown about the hypocritical present. Pronouncements are made about the hopeless future. There are profound, long-winded analyses that could easily begin with the arrival of the East India Company, the decline of the Mughals, the history of the freedom movement, and if not interrupted by someone, can fast progress to pronouncements on how Jinnah should and should not have proceeded and the final judgement about the political and cultural nonviability of Pakistan. The champions of democracy and nonaligned diplomacy are eager to offer detailed comparisons with India and authoritatively list the failures and shortcomings of Pakistan. It never fails to ultimately proceed to a recount of the demise of Bhutto. Unless it has already deteriorated into an unplea-

This glimpse into the living rooms of first-generation Muslim immigrants in Canada first appeared in the March 1985 issue of Inquiry *(reviewed on p. 36). It is reprinted with permission of the publisher.*
Gulzar Haider is Professor of Architecture at Thompson University in Ottawa.
—Jay Kinney

sant verbal battle, this is the time for Islam and Islamization to arrive on the stage.

A STRANGE madness now possesses these people. Everyone has a story to tell about their recent unpleasant brush with Islamic "fundamentalism." The verbal action slowly shifts to a wide-range discussion of how and why there is no unity among Muslims. Like a bad, cheap Western movie, shots are being fired from and towards every direction.

"Doesn't the Qur'an say . . . ? I have heard this *Hadith* somewhere. Iqbal said this . . . Maududi wrote in such and such a book . . . Muslims were once great people, you know! Islamic history is nothing but intrigue and poisoning. These Mullahs look so funny. Why don't they have PhDs before they are allowed to be in the mosques. I went to a mosque only once and decided never to go again. The western people are better Muslims than we are. Didn't the Prophet say that a time will come when . . . During my last Hajj, *Ilhamdulillah,* I had absolutely no difficulty, we had bottled water, air-conditioned busses and tents. I can never understand why Islam has allowed men to . . . The only way to Islam is through science. You know what Bernard Shaw said about Islam? Have you heard what a medical professor from Toronto said about embryology in the Qur'an? I have been searching for a translation of the Qur'an that can cut out the repetitious style of the original in Arabic. The problems of the Muslims are not religious or moral; they can all be explained as maldistribution of wealth among feudal lords and workers. Illiteracy is the real culprit. Why can't they control population? We are Canadian Muslims; I hate to see us embroiled in the Muslim world that we have left behind. We are one Ummah. What is this Ummah after all? I hate this mixing of politics with Islam. We are in a bad shape because we have abandoned the pillars of Islam. You are being philosophical. I am just a Sufi. Times have changed. If the Prophet had come today, he for sure would have used a video. You are indeed a modernized Muslim. You must be a fundamentalist. I cringe when they call me a brother. Religion is a personal matter. We are Muslims because we were born to our parents. Have you seen *Gandhi*? I wish we could make videos about great heroes of Islam. I can't understand why these bearded fossils tell us that interest is *haram.* You, brother, are really bordering on blasphemy. May Allah forgive us all (it is really meant to convey that you are deviant and are in real need of Allah's mercy)."

Before the situation becomes irretrievably ugly, a seasoned community leader announces a sudden fund raising appeal for the mosque extension or setting up an Urdu school. If this does not happen or does not work, there is always a master joke teller who has been invited just to become useful at such critical junctures. There is, of course, always the charming personality of the hostess who appears on the scene and admonishes these men to stop this "serious" discussion and come for the food.

SOME triumphant, others dejected, some disoriented with confusion, and others just plain famished, they all respond to the gracious call. Angry at heart, on the surface they sound friendly and congenial to each other. On the short path to the dinner, a few apologies are made "in case I have hurt your feelings." "No, no, it is perfectly fine, we must carry on this discussion some other time." Deep down both sides are resolving to get even next time.

The stunning variety of foods, the grandiose scale of the dining table, the chandeliers with the dimmer switches that the host quite casually arranges to demonstrate, all evoke compliments from the guests and are responded to with pious *Ilhamdulillahs* or the stories about "We picked this up on our last stopover in Europe." The joke teller has also warmed up by now and everyone is laughing. The situation is congenial, at least apparently.

Till now there is one person who has been comparatively quiet. He represents the type who has for years been refining the art of simultaneous loyalty to different cultures and world views. They manage to maintain different circles of friends: Canadian colleagues and business associates, other ethnic friends with shared literary and musical interests, and Pakistani Muslims. During political campaigns and local elections, they have ready questions for their area candidates and they must work hard at being involved in the political process. They are described as "jolly fellows" and "model immigrants" by their colleagues; among their non-Muslim friends they are credited for their tolerance and broadmindedness (in contrast with those fanatics!) and amongst their own kind, they are recognized as practical, successful Canadian-Pakistani Muslims and are subjects of hidden envy.

Desserts have now been served and the first round of tea and coffee has just begun. Tributes to the deliciousness of food, hospitality and the house have been made. Guests are satiated. Jokes have run out. It is too soon, however, to leave. It is not a successful dinner event that gives the hosts as well as guests enough time to

"If the prophet had come today, he for sure would have used a video."

"You know what our real problem is?

"We have come here but we are not assimilating."

have natural rest that night. Silence is threatening and there is an uneasy calm.

As if duty bound, our hitherto quiet, authoritative Canadian-Pakistani volunteers to sum up the entire pre-dinner proceedings: "You know what our real problem is?" Everyone is eagerly waiting for the revelation. "We have come here but we are not assimilating; we are Canadians but we do not enjoy what people enjoy here. We do not champion a hockey team; we do little for Christmas; we don't even go cross-country skiing; we are not becoming economically strong in a capitalist society; we have not formed a voters' lobby; we are not . . . we should . . . we must . . . " This is a perfect time for retaliation by someone who deep down dislikes this successful person and has recently been afraid of losing his job. He has a long story to tell about the discrimination and humiliation he, his wife and his children have faced since they came to Canada. He even has friends in the U.S. and Britain whose plight is the same as his. His emotional conclusion is that "they will never accept us, even for a hundred years." To this our Canadian-Pakistani, in his carefully concealed anger and in his authoritative yet diplomatic tone, repeats once again his thesis and uses our suffering friend as an example of what happens to those who do not try to integrate, assimilate and are, because of their laziness and fanaticism, not worthy of success in Canadian society. The tone and substance of the answers is, "look at me and compare yourself to me and you will know why you are not being treated well . . . "

THE mood is fast getting depressed. A perfect opportunity for the "scholar of the evening" to make his entry. This "scholar" is usually a person who has read a book each on Islam and history, which makes him two books ahead of the entire gathering of that evening. Quite confident of the comparative ignorance of his audience, he presents an eloquent historic analysis, condemns colonialism, lists the crimes of orientalists, throws in a good measure of names that he knows will impress everyone, talks of the imminent decay of western society, talks of the present as a mere page of the unfolding book of the destiny of man and finally rewards his listeners by promising the glorious renaissance of Islam that is just around the corner. To the scholar's visible disgust, someone brings up a mundane detail like, "My young boy wants to take a girl to the graduation dance." The scholar, quiet and hurt because his global scenario has been missed, slips back into his reflective seclusion with a second cup of tea.

The remark about the dance has started a spirited but progressively pathetic discussion on the future of the next generation. There are perennial questions of language, culture, religion, morals and marriages. Will it be Urdu, Arabic or none; should it be Michael Jackson or Mahdi Hassan; will they read Iqbal, Faiz or pulp fiction? From one corner, there is a brilliant, absolutely original idea that equates rock music to the *Qawwali* of the previous generation. Someone tries for the tenth time to bring everyone to the straight path by suggesting that all we need to preserve Islam and culture for the next generation is to teach these boys and girls the five pillars of Islam. For the tenth time, everyone nods piously while maintaining the hidden doubts about the wisdom of it all.

By this time, the confused emotion, suppressed anger and pervasive hypocrisy embodied in the entire event of the evening has started showing its effects. Hearts feel burdened. The spirit is low. Body needs rest. Tomorrow children have to be taken to the mosque. Day after is a working day where they have to be proficient and personable, brilliant "chips in the Canadian mosaic." Children, a bit confused, visibly bored and tired, have started emerging from the TV room. The ladies are taking a last jealous look at the expensive furnishings and resolving to take concrete steps to catch up.

The parting, however, has to be civil and smiling with ardent promises to get together again. There are even declarations about doing something really productive about the issues discussed this evening "as soon as we get some time."

In the car heading home, it becomes intuitively clear that we suffer from gaping disparities between our real and our professed reasons to stay abroad, our awareness of issues and our will to take appropriate action, our apparent pride in our ethnicity and faith and our well-concealed disgust with our own kind. We are increasingly aware of our tokenism to both our religion and our nation, further confused by our sporadic attempts at exhibiting loyalty to Canada. We mistrust our own statements because we know they are false. Slowly we come to mistrust even our thoughts and emotions, and ultimately the disease spreads to all our being and we trust no one.

On Sunday, as the body is tired and the spirit tarnished from last night's experience, we resolve to abandon this aimless, materialistic, self-deceptive, unhealthy and hollow lifestyle, but long before the next weekend, another invitation has been accepted. ■

Submission

ROBERT HORVITZ: Directives and epigrams from the hadith (sayings attributed to Muhammad but not found in the Qur'an). Not all Muslims accept the same version of hadith, or interpret individual sayings the same way. This version is Turkish/dervish. Photographs of mosques and men praying, parallel texts in English and Arabic, calligraphic settings of 99 names of Allah, and ample white space make this book more sumptuous than its price would suggest. Shows Islam to be harsh, compassionate, lofty in aim, petty, profound, hokey — in short, contradictory. As the back cover says, "The submission to God is so difficult that you cry tears of blood."

Submission
(Sayings of the
Prophet Muhammad)
Shems Friedlander
1977; 144 pp.
$5.95
($7.45 postpaid) from:
Harper & Row
Keystone Industrial Park
Scranton, PA 18512

Hattat Hamid al-Amidi writing Ahi Tesslimiyet, in his small room which suffers from a leaky ceiling, no heat and no plumbing. In the midst of these conditions Hamid, in his overcoat, writes the Beautiful Names of Allah.

AL-BARR

The Source of
All Goodness

THE MESSENGER OF ALLAH, peace and blessings of Allah be on him, has said: "Allah does not take into account your figures or your wealth, He looks and values your hearts and deeds."

[Reported by Abu Hurairah]
[Transmitted by Muslim]

Covering Islam

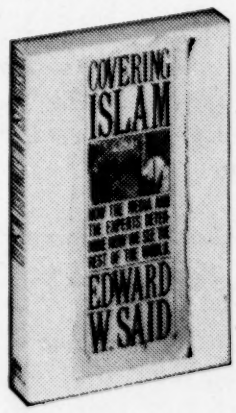
ROBERT HORVITZ: Although the subject is Islam, this book focuses on a larger problem — the U.S. media's dangerously narrow, shallow coverage of events abroad, and in particular the hostile and often distorted portrayal of Islam in the American mass media. The "problem of Islam" is seen as a symptom of another problem, larger still: the breakdown of the power-checking balance between the government and ostensibly independent news organizations during intergovernmental crises. Government and media tend to form an uncritically nationalistic "front," when unbiased, critical reporting is most urgently needed. The book was written during the long seige of the U.S. embassy in Iran. Read now, it seems to lean a bit too hard into the wind, but it still overflows with historical insight and thought-provoking comment.

•

Far from being a uniform or even a coherent movement, "the return to Islam" embodies a number of political actualities. For the United States it represents an image of disruption to be resisted at some times, encouraged at others. We speak of the anticommunist Saudi Muslims, of the valiant Muslim rebels of Afghanistan, of "reasonable" Muslims like Sadat, the Saudi royal family, and Zia al-Haqq. Yet we also rail at Khomeini's Islamic militants and Qaddafi's Islamic "Third Way" . . . in Egypt the Muslim Brotherhood, in Saudi Arabia the Muslim militants who took the Medina mosque, in Syria the Islamic Brotherhoods and Vanguards who oppose the Baath party regime, in Iran the Islamic Mujahideen, as well as the Fedayeen and the liberals — these make up a small part of what is an adversarial current running through the nation, although we know very little about it.
In addition, the various Muslim nationalities whose identities have been blocked in various postcolonial states clamor for *their* Islam. And beneath all this — in madrasas, mosques, clubs, brotherhoods, guilds, parties, universities, movements, villages, and urban centers all through the Islamic world — surge still more varieties of Islam, many of them claiming to guide their members back to "the true Islam."

Only the tiniest fraction of this diverse Muslim energy is available to the Westerner now being asked by the media and by government spokesmen to consider "Islam." The most serious misrepresentations occur when Islamic "resurgence" is solicited. In the minds and hearts of its adherents, surely Islam has always been resurgent, alive, rich in thought, feeling, and human production. And always in the thoughts of the faithful the "Islamic vision" (in W. Montgomery Watt's useful phrase) has involved them in creative dilemmas. What is justice? What is evil? When are orthodoxy and tradition to be relied on? When is *ijtihad* (individual interpretation) in order? The questions multiply, and the work gets done — yet we in the West see or hear little of it. So much of Islamic life is neither bound by texts nor confined to personalities or neat structures as to make the overused word "Islam" an unreliable index of what we try to apprehend.

Covering Islam
Edward W. Said
1981; 186 pp.
$4.95
($5.95 postpaid) from:
Pantheon Books
Random House
Attn. Order Department
400 Hahn Road
Westminster, MD 21157



THE PORTABLE UNIVERSE

Getting to the Heart of the Matter with Cellular Automata

Stephen Wolfram

by Steven Levy

It took Steven Levy's inspirational book **Hackers** *to crystalize the role of computer gamesters in shaping our contemporary culture. Out of unstructured, somewhat chaotic play came the highly structured work of people-size computers. We organized the Hackers' Conference last year (WER #46, p.44) to further refine the "hacker ethic" Levy proposed in* **Hackers** *(information should be free, merit goes to hands-on experience). Pursuing the trail deeper, he now comes to the most elemental game, Cellular Automata, in which complexity satisfyingly abides in simplicity. The closest analogy is organic life.*

On another track altogether, Levy is currently researching a book about the fugitive '60s activist Ira Einhorn, a mildly notorious former **CQ** *contributor.*

The MIT Lab for Computer Science supplied the illustrations of cellular automata. The photos of natural worlds were digitized with Thunderscan by Kathleen O'Neill. —*Kevin Kelly*

SOMETIMES DURING LONG PHONE conversations, I will surreptitiously flick on my Macintosh and load in a program called *Life*. The screen will explode with patterns formed by little dots. At first there are many dots, and they move around, disappear and reappear with explosive kineticism. Then, by some odd form of attrition, the dots become fewer; some form hardened patterns, others flicker on and off like neon signs, and occasionally a few form kind of a conga line, jitterbugging to the side of the screen. To casual observers — as I was the first time I saw a similar program — it will seem that the dots are rearranging themselves by some undefined whim. I now understand that impression is misleading. In fact, the very point of *Life* — and the whole class of phenomena to which *Life* belongs — is that things occur by very specific, usually very simple rules. From those simple rules of regeneration comes an engaging complexity that gives breadth, suspense, and even a sense of personality to these inanimate patterns.

It's for these reasons that *Life* has established itself as the most popular computer recreation among mathematically minded hackers and students. I've met some people, notably a wizened hacker named Bill Gosper, who have spent years running these odd simulations and find themselves just as intensely hooked on them as when they first came across the idea. It's fair to say that you can become a *Life* junkie; certainly it's a passion that crosses easily to obsession. (Sometimes when my phone call is over, I'll keep playing with *Life* and forget the other calls I'd planned to make.)

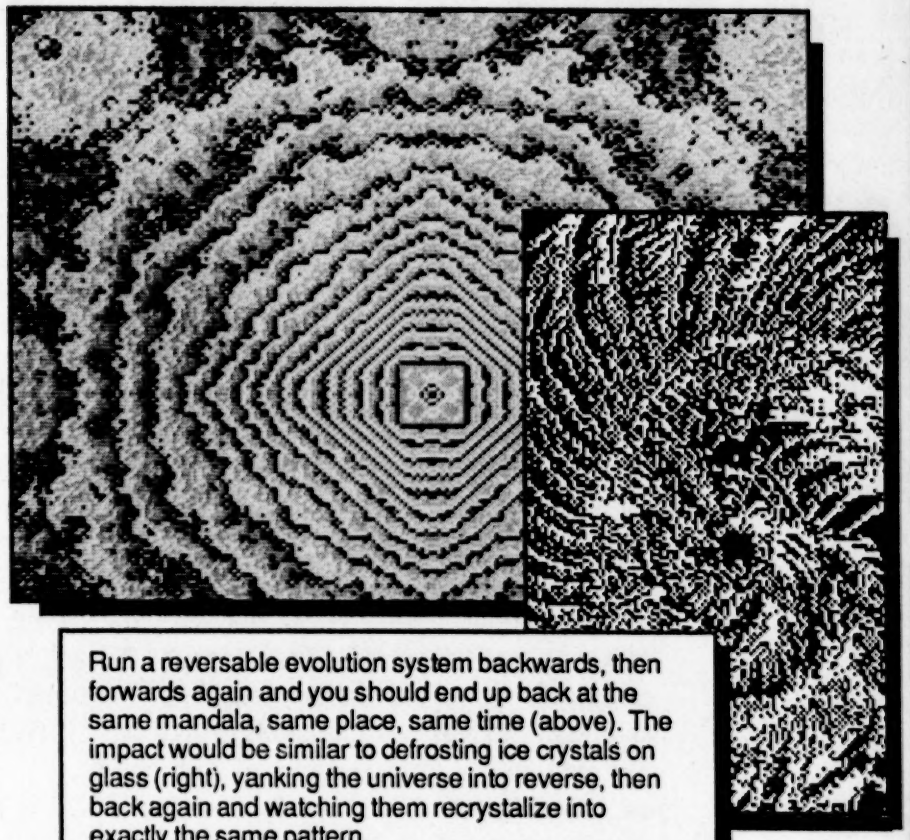
Not the least of *Life*'s virtues is that it is increasingly recognized as "real" science — and relatively uncharted. "You have a chance to do science in a new universe where all of the smart guys haven't nixed you out two or three hundred years ago," says Gosper.

Life is just one, particularly well-named, example of cellular automata (CA). The paradox CA embody — complexity from simple rules — makes them much more than fascinating computer or mathematical exercises. They are windows into our universe. They are skeleton keys to the basis of physical phenomena. They are the scientists' computer games, but they are games only in the finest sense — they involve no more and no less play than the universe itself.

Talk like that makes Stephen Wolfram uncomfortable. At 26, Wolfram has established himself as a serious scientist. A British-born prodigy who began publishing scientific papers in his mid-teens, Wolfram's work in theoretical physics won him one of those MacArthur "genius" awards at the ripe age of 21. He appreciated the gesture but sometimes wistfully expresses annoyance at how the award's baggage of publicity can get in the way of his work. These days his work is cellular automata (some call it his "battle flag"), and he and others at the Institute of Advanced Studies at Princeton, N.J. — where Einstein spent his American years — have been using computer simulations to better understand the way the world operates. It is Wolfram's contention that certain complex systems in nature can only be studied by the use of simulations like cellular automata. The results may be far-reaching and may have applications in weather forecasting, viral studies, genetic biology, and the programming of a new form of supercomputer.

More important to Wolfram is the theory itself — that cellular automata are valuable, possibly essential tools in understanding the universe. It's a controversial stance. Some people claim cellular automata are one step short of a mathematical I Ching, wherein meaning comes from the observer rather than the experiment itself. Others distrust the necessary reliance on computers to run the CA simulations; it's counter to traditional science in that CA experiments begin without prior theory — they just *are*. Some formerly admiring colleagues of Wolfram's think he has gone over the edge by throwing himself into such an unorthodox realm with such fury.

"What interests me most about him is the sort of dream he has," says Freeman Dyson, the Institute's most renowned physicist, who is pessimistic about Wolfram's chances of fulfilling the dream. "It is something personal — it's a big gamble. He has a dream that he's somehow or other going to understand complexity. And that somehow



Run a reversable evolution system backwards, then forwards again and you should end up back at the same mandala, same place, same time (above). The impact would be similar to defrosting ice crystals on glass (right), yanking the universe into reverse, then back again and watching them recrystalize into exactly the same pattern.

the complexity of the real world is mirrored in cellular automata."

So what are these cellular automata? Incantations? High-tech replacements for mind-bending calculations? Physical entities, like germs? Well, no . . . and maybe. Put very simply, cellular automata are mathematical systems in which certain rules are applied in order to find out what happens next. Like any mathematical system, the action occurs in imagined terrain; a nice thing about cellular automata is that, using a computer screen, you can *see* how the system operates. But perhaps the most significant CA feature is its quasi-biological ability to engage in the act of reproducing itself.

Ironically, the man most commonly credited with discovering this phenomena was one of the Institute's most revered members, the late John Von Neumann. What Von Neumann was looking for was a mathematical system simple enough to be easily studied, but complicated enough so that it could have that "life-like" property of self-reproduction. So he used an imaginary grid — like a checkerboard — where each square was labeled a cell. In the initial state, there would be a certain number of cells covered by markers of various types. Then Von Neumann would apply a set of rules to determine what kind, if any, of marker would be there in the next round of the simulation. Like "Musical Chairs," each round results in a different configuration. Using a fairly complicated set of rules, he managed to prove that it was possible to generate a system that could — like a computer — perform any kind of calculation: the patterns could be, in effect, equations, of unlimited complexity. In certain configurations, a pattern of cells would indeed duplicate itself, a pure-mathematics form of reproduction. After a certain number of "rounds" a

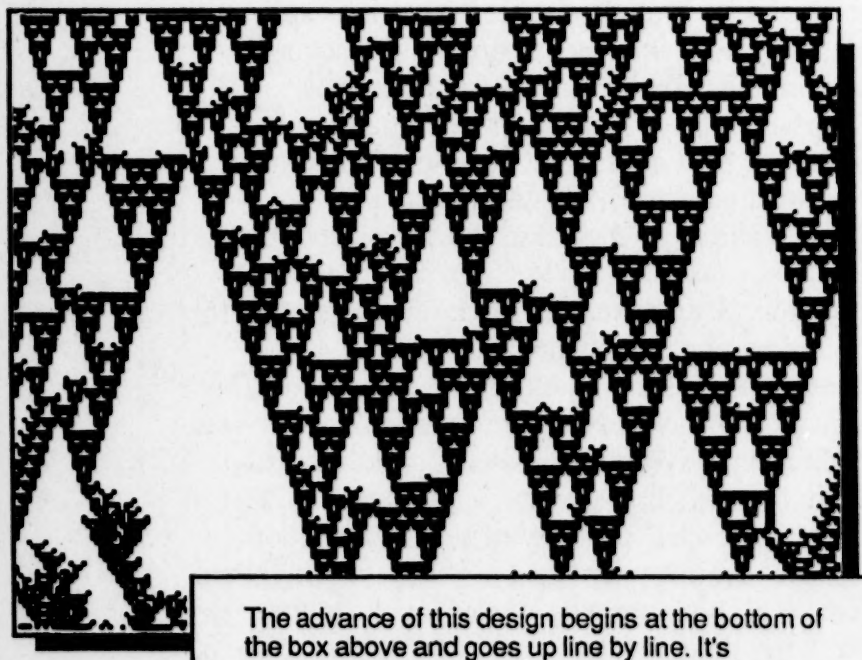
shape would revert to its previous position.

All that was fairly abstract physics. There was some follow-up to Von Neumann's work, but, at least in Stephen Wolfram's current opinion, not much of value. In 1970, though, a strange thing happened with cellular automata — they became a cult phenomenon.

It seems that a Cambridge, England, mathematician named John Conway began playing with cellular automata to see if he could do what Von Neumann did with a set a rules so simple that the process could easily be done on a "Go" board. (Go is the Japanese board game played with stones on a grid-like surface.) Conway is a world-class mathematician obsessed with playing games; here was a chance to combine both pursuits. He and his colleagues at the university spent their "tea times" switching markers on the board, trying out different permutations until they came up with one that generated unpredictable results from these elementary rules:

If a cell is on (or alive), it stays on in the next generation if either two or three of its immediately neighboring cells are also on. Otherwise it is off (or dead).

If a cell is off, it turns on (is born) when three live cells border it.



Stephen Wolfram

The advance of this design begins at the bottom of the box above and goes up line by line. It's generated by unsophisticated rules. Similar ones may calculate the living patterns on the mollusk shell below.

Despite the simplicity of the parameters for birth and death in this game of *Life*, as Conway called it, the configurations on the Go board would change in unpredictable ways. It became fascinating to see what would occur from an initial pattern: whether it would atrophy to a few "still lifes," die out entirely, or, as it happened in a few cases, turn into patterns that would replicate themselves after a number of generations — becoming "alive" in a sense, attaining a mathematical sort of immortality. Conway managed to come up with configurations that could successfully ape all the elemental functions of an actual computer — that was his original purpose — but the game of *Life* took on a life of its own in late 1970 when Martin Gardner, a columnist for *Scientific American*, wrote about Conway's experiment. The column immediately triggered a virtual army of *Life* explorers, many of them using huge computers (back then there were no small computers) to run *Life* simulations through thousands of generations.

One of these was Bill Gosper and a group at MIT, which discovered a configuration called a "glider gun." A "glider" is a *Life* pattern (or a pattern in any cellular automaton) that "moves" from one point in the grid to another, regaining its shape at a given number of iterations. The glider gun shot off these little travelers. It was a kind of a *Life* source.

This proved to have some theoretical importance. It also spurred some cosmically weird theories. Some scientists speculated that using *Life*, one could actually create *real* life. No joke. They imagined that if the configuration were sufficiently large, and done just right, it would be sort of a digital equivalent to the primordial soup that generated our earth-bound biology. It sounds like quite a leap of faith to insist that a mathematical exercise might one day generate bees, bears, bugs, and Joan Rivers, but some took these conjectures very seriously. "It is no doubt true," John Conway says somewhat sheepishly, "that on a large enough scale [*Life*] would generate living configurations. Genuinely living. [They'd be] evolving, reproducing, squabbling over territory. Getting cleverer and cleverer. Writing learned Ph.D. theses. On a large enough board, there's no doubt in my mind this sort of thing would happen."

This, I know, is a tough one to take. But Conway is not the only "respectable" theorist who believes that a large enough CA system could accomodate patterns whose continued existence would depend on a persistence against the odds. *Life*-beings would become survivors because of developed traits that enable them to thrive. Other traits would develop, making the colonies more sophisticated, more hardy. Just like Darwinism.

Of course, a "large enough" board would be quite larger than our solar system, but in physics the mere possibility of something happening is

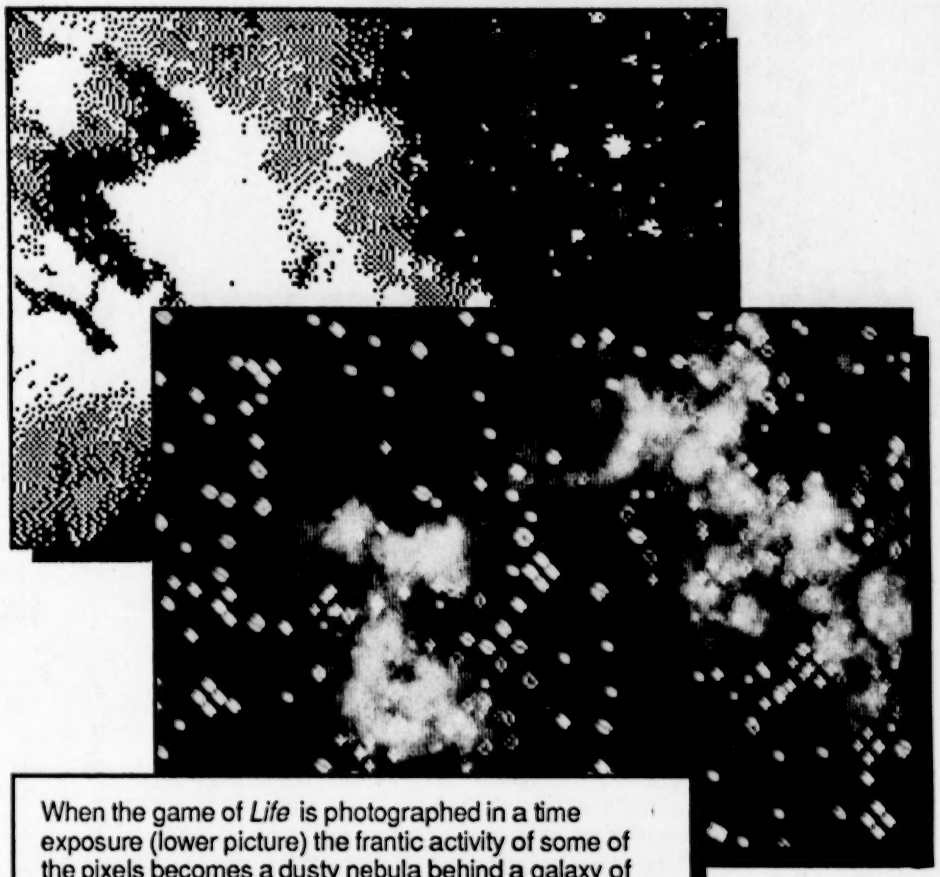
pretty significant. For a while an MIT professor named Ed Fredkin would startle people by insisting there is no proof that we humans — and the rest of our sorry universe — aren't some random configurations in a game of *Life* run by some hyper-size computer hacker somewhere.

Though Stephen Wolfram doesn't deny the possibility of all that conjecture, he avoids that sort of *Twilight Zone* speculation. His attraction to cellular automata lies in their ability to generate complex behavior acting by simple rules. While a leap of faith seems necessary to accept the "*Life*-begets-life" theory, Wolfram is making a different, though no less significant, assertion. It is an assertion based on the same principles that motivated Newton and Einstein: that the oblique universe we live in operates by concise and aesthetic principles. While we have discovered some of these elegant rules, we still do not know what rules (if indeed they do exist) govern the interaction of matter when they work in systems. Wolfram not only believes those rules exist, but thinks the key to their discovery is cellular automata.

Wolfram explained it to me one day in his office at the Institute's Fuld Hall, a hoary building in which his corner is defiled with computer terminals, boxes of books and papers and wrappers from Cadbury chocolates. Wolfram is of medium build, with dark, unkempt hair, and a plump face that lends him an air of callow dissatisfaction with his surroundings. But when he speaks of his work, his more cherubic qualities submit to an intensely mature, confident demeanor. "My main interest is understanding a question that one would have thought had been studied or answered — or at least looked at — for a hundred years or so," he says. (Wolfram's astonishment at the inadequacies of his scientific predecessors is boundless.) "In nature, there are a lot of complicated patterns, systems which have complicated behavior. If one looks and picks these systems apart, he finds that the individual parts of the system, microscopically, are quite simple. So I've been interested in trying to see whether one can formulate some sort of general principle to describe how complexity can arise in systems in which construction is very simple. We started looking at cellular automata because they seemed to be systems that were the simplest in construction which still exhibited the kind of complexity one seems to see in nature."

The idea was to run these CA simulations as little samples of reality — like using lab rats instead of humans in experiments. Tiny universes. By learning more about the rules of these different universes, you could get rules by which all universes work. Theoretical physics as a spectator sport.

This is quite a departure from equation-laden tradition. The standard way to make models of complex systems is by using something called

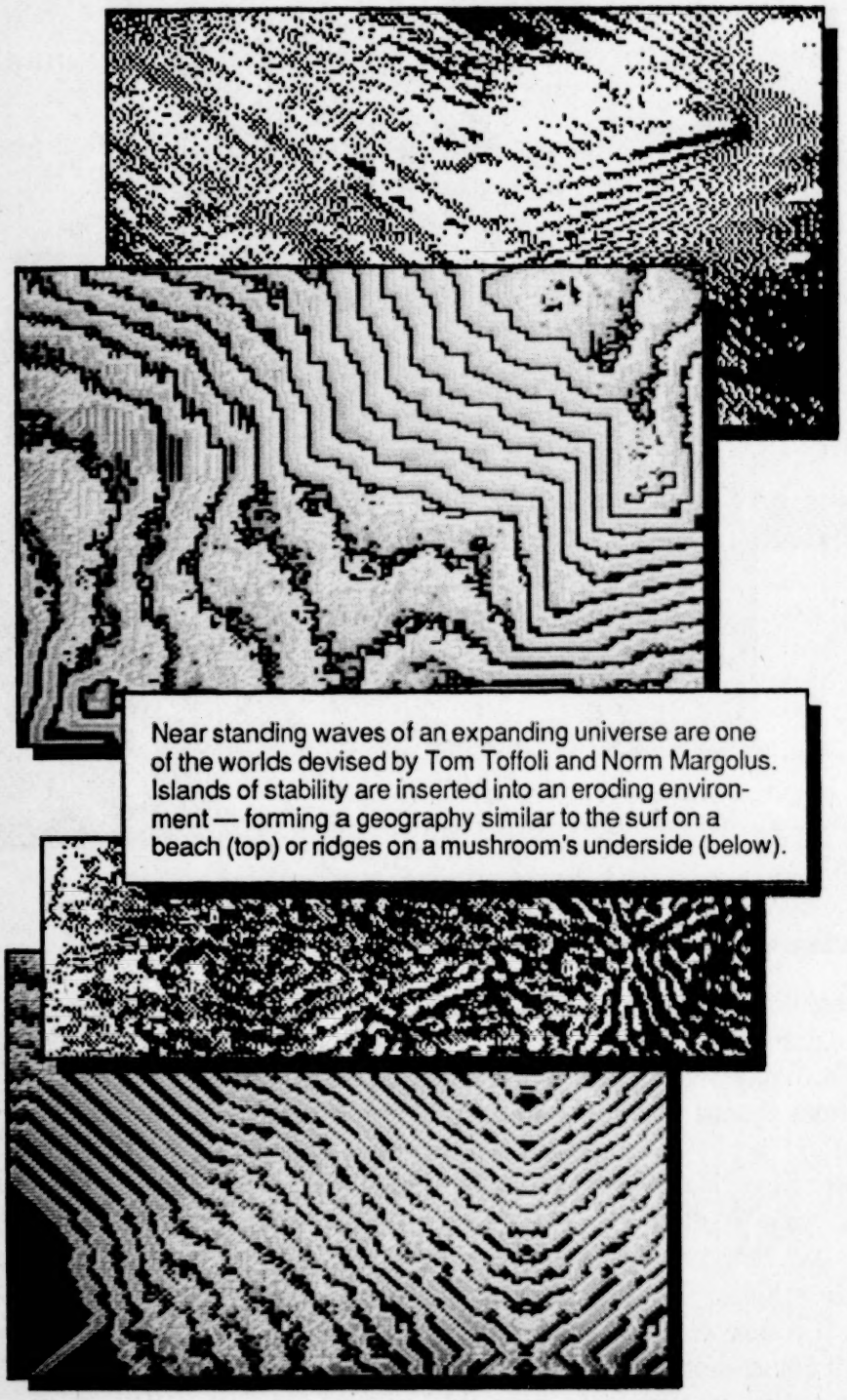


When the game of *Life* is photographed in a time exposure (lower picture) the frantic activity of some of the pixels becomes a dusty nebula behind a galaxy of stable dot clusters. The texture of galaxies in space (above) is not explained by conventional formulas.

"differential equations," a mind-bending form of calculation that Wolfram, at least, considers of dubious value for the task. This point of view sets Wolfram against many practitioners in the hottest new field in physics, the study of dynamical chaos. "Most of the chaos work has really missed the point," says Wolfram.

What is the point here? In order to try to simplify things, Wolfram points to a poster on the wall. It is a representation of a cellular automaton, in full color, shot from a computer screen. Like many of the simulations he runs, it has a pyramid-like structure, beginning with a single cell on the top line (the "seed") and then, applying whatever rules he assigns, generating a new generation of cells on the line below. As these kinds of simulations run on a computer screen, the patterns fill in underneath, much the way a dot-matrix printer produces a print-out of a graphic image, line by line. The simulation on the poster began with a single blue cell. Using simple rules for generation it developed a pyramidal structure with a fascinating symmetrical pattern of little red inverted pyramids, cross-hatched blue braid-like structures, and fields of black triangles, all of varying sizes and consistencies.

"What I believe is actually going on [in the physical world] is something like what's happening in that picture where you start with a dot and follow simple rules," says Wolfram. "If you look at a vertical column only and just analyze the colors, it would look like it was random [blue, black, black, red, blue, etc.], even though in fact the rules by which it was made were quite simple. I believe that most of the time when randomness is observed, in



Near standing waves of an expanding universe are one of the worlds devised by Tom Toffoli and Norm Margolus. Islands of stability are inserted into an eroding environment — forming a geography similar to the surf on a beach (top) or ridges on a mushroom's underside (below).

some sense what you're seeing isn't random. It's just so complicated that you can't tell the difference from it being really random or not."

For an example, Wolfram brings up a classic instance of supposedly "chaotic" or "random" behavior, the behavior of water in a river when the water hits a rock. For all practical purposes, it looks like the water molecules go helter-skelter in one direction or another. According to Wolfram, the water, like a cellular automaton, is probably following simple rules which generate behavior that only *seems* crazy. One day he hopes to build a computer model complicated enough to prove that fluid turbulence is indeed governed by principles like those of cellular automata. The proof will come by running the computer model.

In other words, Wolfram believes most of what we perceive as random behavior of things in systems is actually behavior following simple principles. He has already embarked on a classification of some of these rules — codifying the way things work in systems much the same way earlier physicists have given us rules for the way less complicated things work (like gravity or motion.) But a particular problem arises from the flip side of Wolfram's theory: complex systems might be following simple rules, yet it's damn near impossible — in some cases literally impossible — to figure out what those rules are because the results of their application — what we see — appears to be random. Chaotic. Just like that vertical column on the poster.

It is for this reason that government intelligence agencies are reported to be interested in cellular automata as a technique for coding messages. The output looks like gibberish to the observer but makes perfect sense to someone who knows how the output was generated.

Because of this mind-boggling complexity — so deep that it is beyond the capability of even supercomputers to calculate — some of these rules that may exist in the natural world, however elementary they may prove to be, are decipherable only by actually simulating simpler versions of the real-life systems. The world is too big and complicated to fit into a laboratory; it's much better to work in a chunk that's more manageable. That's where cellular automata come in. Wolfram and his cohorts have run thousands of cellular automata, simply watching them and noting characteristics. Eventually, they came up with a classification system, grading cellular automata from the simplest (where the results from applying rules are extremely regular) to the most complicated (where the results are so intricate — and often hauntingly beautiful — that their complexity gives them a life of their own).

"The aesthetic is definitely appealing," says Wolfram's colleague Norman Packard, but Wolfram himself admits that after seeing tens of thousands of these things run, it gets pretty old. The observations often went far into the night, the screens illuminating the slightly unkempt computer room until dawn broke. All making Wolfram more certain that by understanding how these cellular automata worked, he was in essence breaking ground on reaching an understanding about the nature of the universe's complexity.

Wolfram's group is not alone in applying cellular automata to crack long-held secrets of physics. At MIT, a group founded by Ed Fredkin — he of the imaginative theory outlined above — has been working for years with CA and computers. In fact, it was through this group that Wolfram was introduced to cellular automata in 1983 at a small conference held on a Caribbean island owned by Fredkin. The group's trio of scientists — Tomasso Toffoli, Gerard Vichniac, and Norman Margolus — have designed specialized computer hardware to run cellular automata simulations, and a San Francisco firm called Systems Concepts is starting to manufacture the result: an add-on circuit board to the IBM Personal Computer that makes that low-cost machine run cellular automata more speedily than a

million-dollar Cray supercomputer. (Cost: around $1200.)

Watching a souped-up IBM PC run these simulations can be breathtaking. The color version of *Life* tracks not only which cells are on or off, but which parts of the screen have ever been "inhabited" by a living cell. When a glider appears, it seems like a living creature has been resurrected out of seething random soup.

The MIT group, though, is going beyond *Life* to cosmological exercises that can only be done by cellular automata. "We're working with macroscopic physics," says Toffoli, a dark-haired man with a continental accent. "We are trying to reconstruct the rules of the universe — why did God make these rules instead of other rules? You can know a lot more about your universe if you had a thousand universes — with cellular automata, we can give the rules."

How would an alternative universe behave? It might work by different physical rules. It might, for instance, be hard for large objects to move around. The limits are only imagination. "An exponential explosion of possibilities," says Norman Margolus.

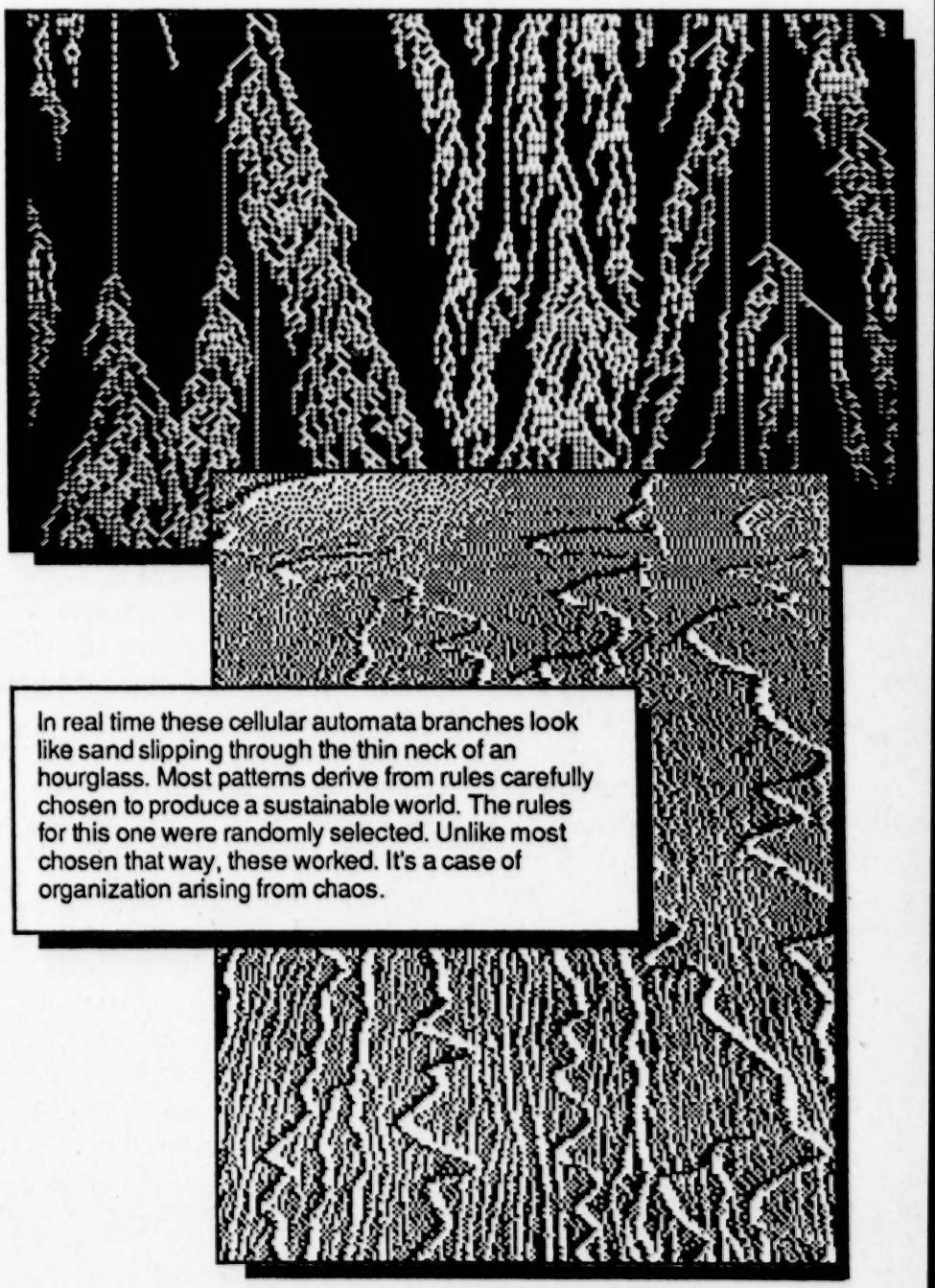
And since the rules of cellular automata can be applied not only to see what happens in the next generation but also to figure what happened in the previous generation, the MIT group is doing a lot of work running universes in reverse. Like running a movie backwards.

I watched an example of this that made some of the "new physics" a bit more vivid to me. These theories have it that some Big Bang actually created the components of the universe as we know them — atoms, energy, the whole bit — and then started a very long process of entropy wherein this seeming equilibrium of physics erodes, and the universe literally falls to pieces. Running a cellular automaton "toy universe" at a high speed lets you actually see this process. You can run things backward until things draw into what looks like an explosion, or run them forward until structure entropies to what looks like television snow, and suddenly coaleses into that same explosion. The Big Bang is neither an ending nor beginning — it is simply a very visible point in a cycle. Just a logical, inevitable result of applying the simple rules that govern the particular cellular automaton.

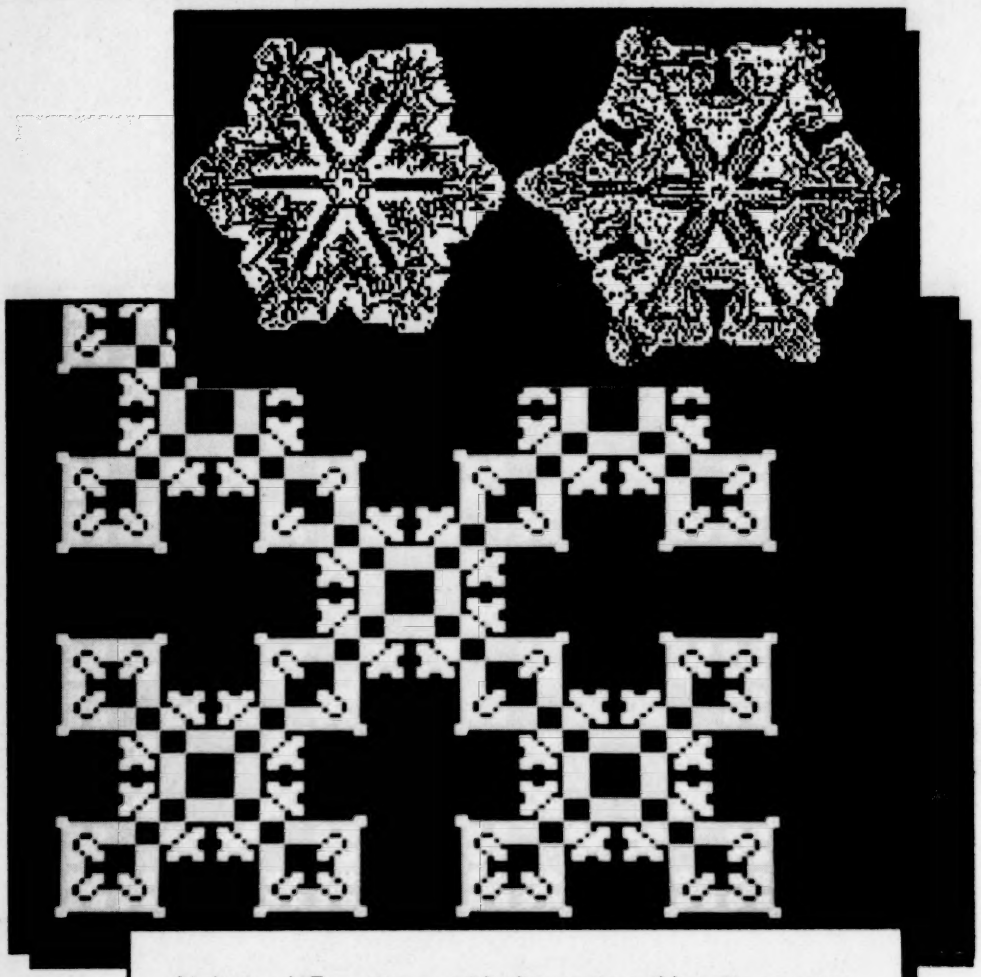
It's an easy, but probably misleading, step to think that our universe works that way too — that if you ran either backwards or forwards, after billions and billions of years you would get back to the same point we are now. Kind of an extremely long-playing tape loop. But it's possible. And finding what is possible, and what is likely, as far as universes are concerned, is important to the MIT group. "We want to find what general properties belong to *all* universes," says Toffoli. Their method is to play with different universes — those made-up universes of cellular automata — to see what they may have in common and to figure out how our universe works.

Not everything the MIT group does with cellular automata is as far out as the stuff described above. They do more conventional studies in things like fluid dynamics, publish in noted scientific journals, and attend conferences and other conventional stuff. "We're flaky," Norman Margolus admits, "but it's supposed to be a secret."

Still, after some of those mind-bending experiences at MIT, it is almost comforting to return to Princeton and Wolfram's group. I spent some time there with Rob Shaw, who is 38, has long dark hair and a Butch Cassidy moustache, and calls himself a "sixties refugee." After getting his doctorate in Dynamical Systems at the University of California at Santa Cruz (UCSC), he'd gone through a fallow period, having second thoughts about "the whole science trip." All too often the politics of physics — publishing in the right place, getting grants, getting recognition from the right people — seemed to interfere with the real work. Then he came to Princeton and got reexcited by working with Wolfram in cellular automata. He liked the chance to break out of the science mainstream and



In real time these cellular automata branches look like sand slipping through the thin neck of an hourglass. Most patterns derive from rules carefully chosen to produce a sustainable world. The rules for this one were randomly selected. Unlike most chosen that way, these worked. It's a case of organization arising from chaos.



Christened "Forget-me-not" by its creators, this pattern grows along four axes in snowflake style. The rules in this case dictate that tiny square buds (blossom blue in the original) will sprout from the big squares, while the large squares shrink.

into what he considers the cutting edge of physics.

We watch a high resolution monitor where a cellular automaton population is frantically springing and receding in black and yellow. "Like looking down on a saucepan that's boiling water," Shaw puts it, accurately. He believes that cellular automata "could have something to say about society. If people learn to manipulate these it could be really radical." His goal is to learn enough about the physics of living systems that it might be possible to construct them. Some fairly sophisticated CA applications could generate patterns that seemingly act on their own. (Conway's belief that cellular automata like *Life* can create "real life" is based on that contention.) Use the formulas in robotic applications, and you have a revolution. Creating something autonomous — like, say, an ant — would have incredible implications. "It could put a large number of people out of work," he says, "or it could free a lot of people." The screen percolates. "What I want to do," says Rob Shaw, "is figure out how to get an ant."

Shaw has quite a ways to go, but his colleague Norman Packard, the third member of the group, is well along in using cellular automata to model snowflakes. He studied the properties of snowflakes — the way they form when the thin, cool air can no longer hold water vapor, and the vapor solidifies in its peculiar patterns. Then he wrote computer programs that generated gorgeous snowflakes in reds, blues, yellows — by cellular automata techniques. It brought up the question: Is this the way real-life water molecules know how to arrange themselves in the intricate patterns that make up snowflakes? Packard has ordered sophisticated video imaging equipment to try to capture the process of real snowflake generation, so he can compare it with his cellular automata models.

If it works, it will be significant proof that cellular automata principles do indeed exist in nature. Other kinds of evidence might come from studies of mollusk shells which have pigment patterns that strikingly resemble some of Wolfram's CA simulations. If the proof does exist, if it can be shown that by using CA one can create virtually the same behavior that exists in nature, then you may well use CA to make predictions about nature.

But incontrovertible proof really isn't essential to justify continued studies with CA. Wolfram's evangelism on the subject has created a great deal of interest — and even some concrete applications. Botantists use CA to track the spread of disease among trees in forests. One method of studying samples of blood cells to test for disease uses CA to choose which cells to examine; the process supposedly saves considerable time. And then there is the programming of new "parallel processor" computers. These are super-powerful machines which eschew the old model of a central processor to do calculations, but use many processors to do computation faster, and of higher complexity. Wolfram is working with Danny Hillis, the designer of a computer which will use a million processors and be programmed with rules of cellular automata.

Still, skeptics will always accuse Wolfram of chasing some kind of techno-cosmic chimera, and I can see why. There is something deliciously sinful in indulging in cellular automata binges, even as an amateur viewing them. Wolfram recognizes this, and often talks about the possibility of creating a microcomputer program — sort of a Cellular Automata Construction Kit — that will bring that same magic to nonscientists. On one level will be "pretty pictures." But there also would be those who learned to appreciate that the beauty of the graphics derives from a more profound source — mathematics, physics . . . perhaps the same primal rules that generate the genetic code. For me, that's the real excitment of *Life*, or Wolfram's pyramid-shaped automatons, or the MIT group's Big Bang simulations. Behind the aesthetics are the secrets.

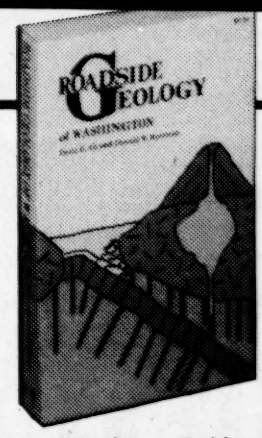
As a lay person, I find cellular automata fascinating because they are not only profound, but visible and tangible — sort of pets made of pure science, an ant colony partially planted in the soil of science fiction. I use them for a quick fix of awe. From a random cacophony of blinking pixels, suddenly a pattern — a glider — begins a steady spider-like crawl across the screen.

It's alive! I guess. ■

Highway 12 passes through this fascinating road cut about 8 miles east of its junction with U.S. 395. Bedrock exposed in the right side of the picture is gently dipping basalt lava flows. The left side of the picture shows an old channel filled with debris left by a Spokane flood. More flood debris in the top of the exposure blankets both the basalt and the old channel. —Roadside Geology of Washington

Roadside Geology Series

PETER WARSHALL: I've heard friends say that the trip from Phoenix to San Francisco was boring and that crossing Texas is an ultimate test of driver patience. Well, for a moment's break from local radio, try "The Roadside Geology Series." Coordinated with highway mileage markers, this series transforms ugly, endless roadcuts into Earth history. It takes that stratospheric 10-hour cruise behind the wheel and locates it on top of a 12-mile-thick crust. Each book has a general introduction and a back-of-the-book vocabulary list. One of the best series of natural history for car nomadics.



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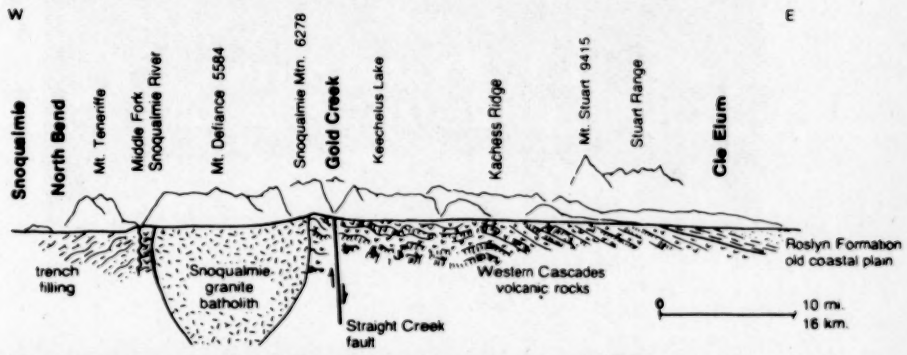


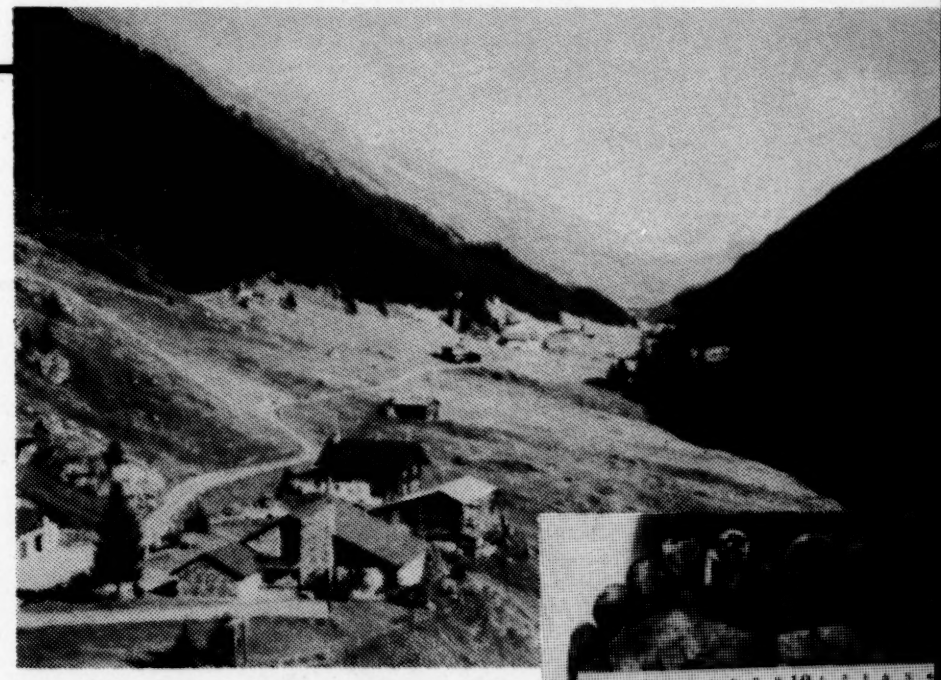
Section across the North Cascades along the line of I-90.

Mountains & Man

MICHAEL ENGLE: Some folks love the ocean or the plains; for me it's the mountains. This book has more information in one place than anything else I've seen about mountains. Many odd things peculiar to mountains such as the huge blockfields often encountered in the Sierra or Cascades are explained here. I've found occasional need for a dictionary for some specialized terms.

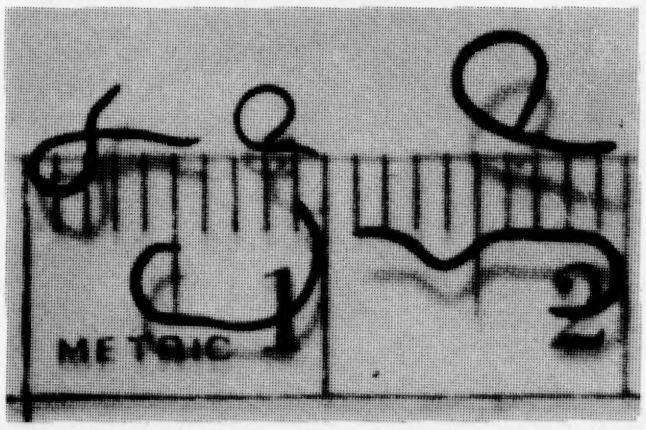
•

The presence of mountains fundamentally transfigures the earth and greatly alters the character and distribution of natural phenomena. The extent to which this is true can perhaps best be seen by thinking momentarily about what the world would be like without mountains or hills. Imagine a land surface with no slopes or inequalities except for coastlines, and how this would affect the nature and distribution of environments. Probably the major change would be the homogenization of the earth's surface and of its habitats. There would be fewer climatic-biotic regions; they would occupy vast areas and merge imperceptibly into one another. Mountains serve to delineate, accentuate, and modify the global patterns of climate, vegetation, soil, and wildlife.



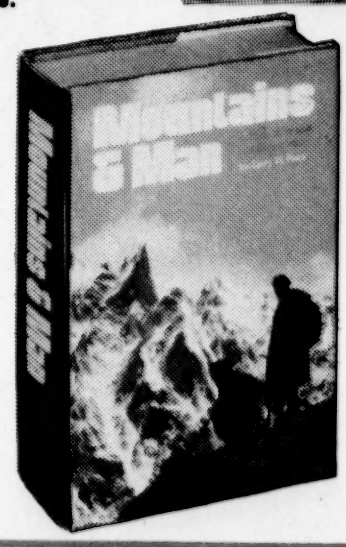
View of an east-west valley near Davos, Switzerland, showing settlement and clearing on the sunny side (south-facing), while the shady side (north-facing) is left in forest.

The hard and cracked feet of Man Bahadur, the Nepalese pilgrim who was found walking barefoot in the snow near the base camp of the 1960-1961 American expedition on Mount Everest at 4,650m (15,300 ft.). He had no shoes, wore only a khaki overcoat, and slept in the snow at subfreezing temperatures without suffering from frosbite.



Snow worms (Mesenchytraeus solifugus) from the Coast Range, British Columbia, Canada. These creatures, resembling small black earthworms, are found on glaciers and perennial snowbanks, where they feed on aeolian debris. They are active during the day, especially when the sun is shining, and hundreds may often be seen.

Mountains & Man
Larry W. Price
1981; 518 pp.
$35
($36.50 postpaid) from:
University of
California Press
2120 Berkeley Way
Berkeley, CA 94720
or Whole Earth Access

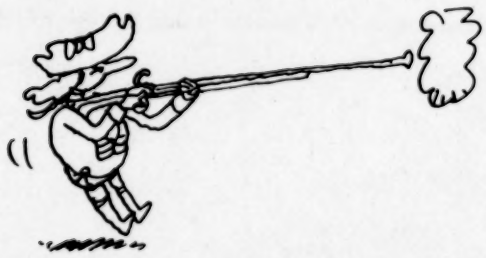


THE BIASED, PEDANTIC, INSUFFICIENTLY REVERENT, AND PROBABLY BEST IGNORED HISTORY OF THE UNITED STATES

BY LARRY GONICK

THE OVEREDUCATED CARTOONIST

OUR STORY: IN 1775, AMERICA PROCLAIMED ITS LOYALTY TO ENGLAND, TOOK AIM, AND FIRED.



CHAPTER 5

IN WHICH HAPPINESS IS PURSUED, GUN IN HAND

SO—IT WAS WAR... ON ONE SIDE, A MIGHTY EMPIRE, EMBRACING ENGLAND, SCOTLAND, IRELAND, PARTS OF GERMANY AND INDIA (ALTHOUGH NOT ALL OF THEM RETURNED THE EMBRACE).

ON THE OTHER— AN INCREDIBLE SHRINKING ARMY, A SELF-APPOINTED CONGRESS WITHOUT THE POWER TO TAX OR DRAFT, AND NOT EVEN A VERY CLEAR IDEA WHAT THEY WERE FIGHTING FOR...

1

TOO WEAK TO WIN, CONGRESS COULD ALSO HARDLY AFFORD TO LOSE... NOT WHILE THE REWARD FOR TREASON WAS AN INVITATION TO THE BARBECUE OF YOUR OWN INTESTINES.

2

HELP! THAT'S WHAT THEY NEEDED... AND, THIS BEING THE AGE OF REASON (IF NOT YET OF TRAINS), THEY FOLLOWED THIS TRAIN OF REASONING WHERE IT LED: STRAIGHT TO FRANCE, THE "OTHER" SUPERPOWER, WHICH ALL GOOD AMERICANS HAD HATED UNTIL JUST A MINUTE AGO.

3

SO— FOLLOWING THE DICTATES OF COMMON SENSE*, AMERICA DECIDED TO GET A DIVORCE.

IN A MOVE COPIED BY MANY LATER REVOLUTIONARIES, CONGRESS FORMED A PROVISIONAL REVOLUTIONARY GOVERNMENT AND DECLARED INDEPENDENCE FROM BRITAIN.

* COMMON SENSE, THE PAMPHLET, AND COMMON SENSE, THE SENSE

THE TASK OF WRITING THE DECLARATION OF INDEPENDENCE FELL TO **THOMAS JEFFERSON**, A VIRGINIA CONGRESSMAN WITH A POSITNE PASSION FOR HUMAN LIBERTY, AS LONG AS THEY WEREN'T HIS HUMANS...

4

JEFFERSON CONTAINED SO MANY CONTRADICTIONS THAT THEY USED TO EXPLODE INTO MIGRAINE HEADACHES... BUT ON THIS OCCASION HE PRODUCED A BEAUTIFUL DOCUMENT:

BEFORE JEFFERSON, THE MOVEMENT'S SLOGAN HAD BEEN "LIBERTY AND PROPERTY..."

BUT T.J. WANTED TO FOUND THE NEW NATION ON SOMETHING A LITTLE LESS CRASS...

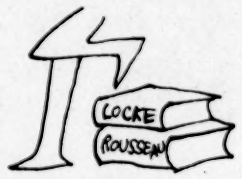
THIS SUBSTITUTE SPRANG TO MIND:

"WE HOLD THESE TRUTHS TO BE SELF-EVIDENT, THAT ALL MEN ARE CREATED EQUAL, THAT THEY ARE ENDOWED BY THEIR CREATOR WITH CERTAIN UNALIENABLE RIGHTS, THAT AMONG THESE ARE LIFE, LIBERTY, AND THE PURSUIT OF HAPPINESS..."

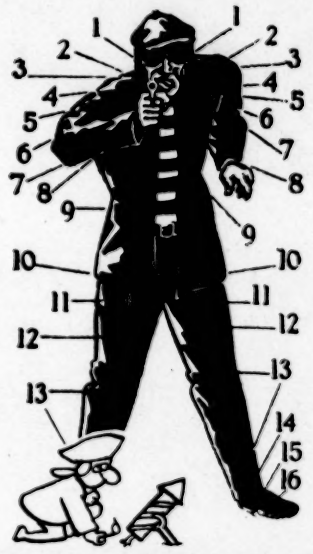
NICE...

JEFFERSON'S WORDS WERE LESS A DESCRIPTION OF REALITY IN 1776 THAN A PROMISE FOR THE FUTURE — THAT EVENTUALLY EVERYONE WOULD GAIN EQUAL POLITICAL RIGHTS, REGARDLESS OF RACE, SEX OR INCOME.

THE DECLARATION ALSO ANNOUNCED THE PEOPLE'S RIGHT TO CHOOSE ITS OWN GOVERNMENT, AN IDEA THAT HAD BEEN IN THE AIR FOR A WHILE, BUT HADN'T TOUCHED GROUND UNTIL NOW.



THE REST OF THE PAPER IS AN (INFLATED) LIST OF THE CRIMES OF KING GEORGE, WHO WAS MADE TO SOUND LIKE A CROSS BETWEEN A THUG AND A SLUG.



CONGRESS ACCEPTED THE DECLARATION OF INDEPENDENCE ON THE FOURTH OF JULY AND WASTED A QUANTITY OF PRECIOUS GUNPOWDER IN A FIREWORKS SHOW.

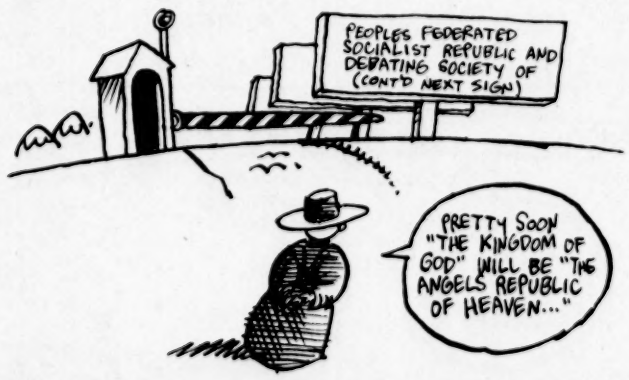
5

MINDFUL THAT NO NATION IS COMPLETE WITHOUT TRAPPINGS, CONGRESS QUICKLY ADOPTED A FLAG (RED, WHITE & BLUE), AN ARMY UNIFORM (BROWN), A BIRD (BALD), ARTICLES OF CONFEDERATION (CLUMSY), AND A NAME (ALMOST AS CLUMSY AS THE ARTICLES OF CONFEDERATION):

THE UNITED STATES OF AMERICA

6

THIS STARTED A TREND IN NATIONAL NAMES. NOW THAT AN INFINITE VARIETY OF GOVERNMENTS WAS AVAILABLE, INSTEAD OF JUST KINGDOMS, A NAME HAD TO DESCRIBE WHAT IT WAS, OR, ON OCCASION, WHAT IT WASN'T.



LADEN WITH THE NEW NATIONAL TRAPPINGS, BENJAMIN FRANKLIN SAILED FOR FRANCE TO NEGOTIATE FOR AID. HE WORE A BEAVER HAT TO REMIND THE FRENCH OF WHAT COULD BE THEIRS AGAIN, IF THEY PLAYED ALONG...

7

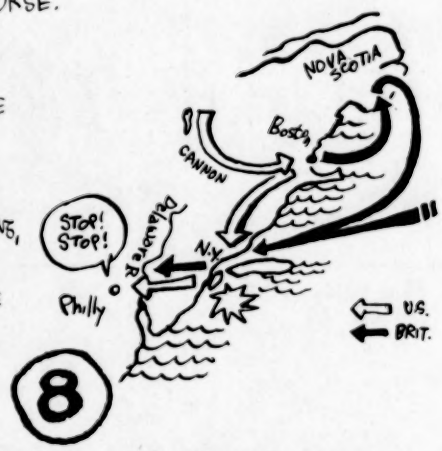
WHILE CELEBRATING THE AMERICAN AS THE GREAT INVENTOR OF LIGHTNING AND THE FRANKLINFURTER, THE FRENCH COULDN'T HELP NOTICING THAT HIS GOVERNMENT HAD NO KING — AN UNHEARD-OF ARRANGEMENT (EXCEPT AMONG THE INDIANS). FRANKLIN DID HIS BEST TO DISTRACT THEM FROM THIS ROYAL FLUSH...

THIS PLOY SEEMED TO WORK, AND FRANCE BEGAN FUNNELING COVERT AID TO THE U.S. THROUGH DUMMY CORPORATIONS.

(90% OF U.S. GUNPOWDER CAME FROM FRANCE.)

27 GATE FIVE ROAD SAUSALITO CA 94965

MEANWHILE, BACK AT THE FRONT, THE WAR HAD BEGUN WELL AND GOTTEN WORSE. IN MARCH, 1776, THE BRITISH, FACED WITH WASHINGTON'S CANNON (DRAWN THERE FROM AFAR BY HEROIC OXEN)*, LEFT BOSTON FOR NEW YORK AND A PITCHED BATTLE. THE AMERICANS, WHO USUALLY PITCHED NOTHING HARDER THAN HAY, FLED IN THE DIRECTION OF PHILADELPHIA, GUIDED BY THE HOWLS OF CONGRESS.



8

THE FIRST—UNSUNG AND (UNTIL NOW) UNPAINTED-CROSSING OF THE DELAWARE WAS STRICTLY IN REVERSE.

THE SECOND CROSSING WAS A SNEAK ATTACK ON CHRISTMAS NIGHT, SURPRISING THE ENEMY WHILE THEY WERE STILL OPENING THEIR PRESENTS. IT LOOKED SOMETHING LIKE THIS:

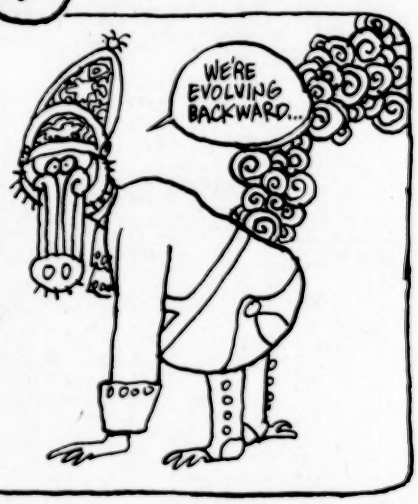
* THE OXEN WERE LED BY 250-LB HENRY ("OX") KNOX, WHO INSPIRED THE ANIMALS BY RESEMBLING THEM.

AS 1777 DRAGGED ON, WASHINGTON FAILED TO STOP THE BRITISH FROM TAKING PHILADELPHIA, WHILE THE BRITISH FAILED TO STOP CONGRESS FROM TAKING TO THE HILLS.

WASHINGTON & CO. WENT OFF TO STARVE AT VALLEY FORGE, A DARK HOUR, BRIGHTENED ONLY BY BRITAIN'S INCREDIBLE DIMNESS IN NOT TAKING ADVANTAGE OF THE SITUATION.

9

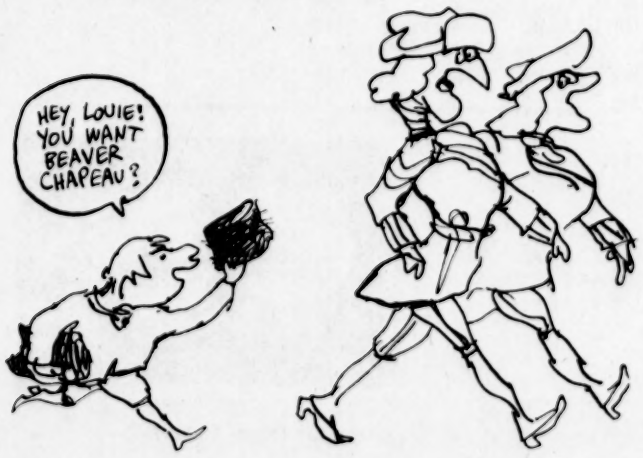
AT THE SAME TIME, 7000 EXTRA REDCOATS WERE TRYING TO HURRY SOUTH FROM CANADA. SLOWED BY AMERICAN GUERRILLAS, WHO MADE THEM FEEL LIKE A BUNCH OF CHUMPS, THE ENTIRE INVADING ARMY SURRENDERED AFTER THE BATTLE OF SARATOGA, WHICH MADE THEM FEEL EVEN LOWER, PERHAPS LIKE BABOONS. IT WAS A TURNING POINT IN THE EVOLUTION OF THE REVOLUTION.



WHY A TURNING POINT? BECAUSE SARATOGA SO THRILLED KING **LOUIS** THAT HE LOST HIS HEAD AND MADE AN OPEN ALLIANCE WITH THE DANGEROUSLY DEMOCRATIC U.S.A.

10

INSTEAD OF COVERT AID, AMERICA NOW HAD FRENCH TROOPS!



BY THIS POINT, A BILATERAL BATTLE HAD ESCALATED INTO A WAR WITH SIX DIFFERENT SIDES...

PATRIOTS: WHITES & FREE BLACKS, FIRED BY DEMOCRATIC RHETORIC, FOUGHT FOR A SIMPLE GOAL:

BRITISH: THEY ONLY WANTED TO KEEP THEIR COLONIES, BUT COULDN'T QUITE SEE SEE HOW..

11

TORIES: AMERICANS LOYAL TO THE CROWN, THEY HAD ONLY WANTED PEACE & QUIET & LAW & ORDER. NOW THEY WANTED REVENGE.

SLAVES: MASTER'S FIGHT TO GET OUT FROM UNDER ENGLAND LOOKED LIKE A GOOD OPPORTUNITY TO GET OUT FROM UNDER MASTER.

INDIANS: MOST SIDED WITH ENGLAND, AS THEY HAD HEARD WHAT THE PATRIOTS WERE FIGHTING FOR.

FRANCE: THE FRENCH WERE TRYING TO DESTROY THE "EVIL EMPIRE," I.E. ENGLAND.

WITH SO MANY SIDES FIGHTING IN ONE PLACE, EVENTS SQUEEZED TOGETHER: BATTLES, RIOTS, INFLATION, STRIKES, A DOG PAPERED WITH DEVALUED MONEY...

12

CROWDED OUT OF THE NORTH, THE WAR SPILLED SOUTHWARD, WHERE PATRIOTS FOLLOWED GENERAL NATHANIEL GREENE. GENERAL CORNWALLIS' REDCOATS ALSO FOLLOWED GREENE, TRYING HARD TO CATCH UP.

WHEN THE REGULARS HAD PASSED, TORIES AND PATRIOTS KILLED EACH OTHER IRREGULARLY... SLAVES FLED... AND PIONEERS CARRIED THE WAR WESTWARD WITH THEIR OTHER BELONGINGS.

13

AFTER MARCHING IN LOOPS, CORNWALLIS DIZZILY RESTED AT YORKTOWN, VIRGINIA. WASHINGTON'S ARMY (⅓ FRENCH, ⅔ AMERICAN) SUDDENLY APPEARED, AND THE FRENCH NAVY DELIVERED THE ***COUP*** WHICH IMMORTALIZED THE NAME OF ITS ADMIRAL ***DE GRASSE***.

THE BRITISH SURRENDERED (THOUGH CORNWALLIS HIMSELF WAS TOO DISORIENTED TO ATTEND THE CEREMONY). UNLIKE SARATOGA, THIS WAS NOT A TURNING POINT BUT AN EXCLAMATION POINT, OR JUST A POINT, AS IN PERIOD.

AFTER YORKTOWN, BRITAIN AND THE U.S.A. HELD PEACE TALKS WHICH PRODUCED THE **TREATY OF PARIS** IN 1782.

14

ENGLAND KEPT CANADA, WHICH TURNED OUT TO BE A GOOD THING, ESPECIALLY IF YOU WERE LOYAL TO ENGLAND, AN ESCAPED SLAVE, OR AGAINST THE VIETNAM WAR. SEVERAL CARIBBEAN PARADISES ALSO REMAINED BRITISH, SO THAT NEW YORKERS WOULD HAVE SOMEPLACE FOREIGN TO FLY IN THE WINTER.

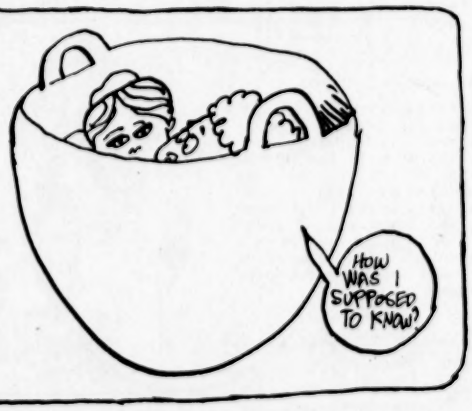
AMERICAN **TORIES** HAD A CHOICE: STAY, AND WATCH THEIR PROPERTY PILLAGED BY PATRIOTS, OR GO TO CANADA, WHERE THEY WOULDN'T HAVE TO WATCH. MOST OF THEM STAYED.

15

THE U.S.A. GOT WHAT IT WANTED, WHICH WAS EVERYTHING.

ABOUT 60,000 **SLAVES** ESCAPED, TRAVELING AMAZING ODYSSEYS TO CANADA, FLORIDA, AFRICA, JAMAICA, ETC... ANOTHER 700,000 SLAVES REMAINED SLAVES, TO HELP CARRY THIS VOLUME TO ITS CONCLUSION.

FRANCE WAS CUT OUT OF THE DEAL COMPLETELY, ALTHOUGH KING LOUIS EVENTUALLY GOT MORE THAN HE BARGAINED FOR, OR LESS.



AND THE **INDIANS** GOT— WELL, YOU KNOW WHAT THE INDIANS GOT.

END

The ruins of Dungkhar Monastery visited by members of the third delegation.

In Exile From the Land of Snows
John F. Avedon
1984; 359 pp.
$18.95
($19.95 postpaid) from:
Alfred A. Knopf, Inc.
201 E. 50th Street
New York, NY 10022
or Whole Earth Access

In Exile From the Land of Snows

SALLIE TISDALE: Many Americans are enamored of China, thinking it a mysterious and admirable society. But our infatuation — like all infatuations — is a blind one, and sees only an enigmatic, exotic place and people. John Avedon, in writing the history of Tibet since the Chinese invaded in 1950, gives us a new way of seeing China, a vision both shocking and unapologetic. It is a remarkable story told remarkably well.

***In Exile From the Land of Snows** is more than history. It is a very sad book — even heartbreaking — but it is also the portrait of a culture and religion of heroic proportions. Scattered among the explicit tales of systematic torture and slow, deliberate starvation of innocents are anecdotes of humor, hope, and determination. The Chinese have, for over thirty years, tried to extinguish Tibetan culture. They still control the land and many of its people — and they have destroyed many of its artifacts. But the fourteenth Dalai Lama and his people have grown stronger for their abrupt plunge into 'worldly' society. Ironically and unintentionally, China has created a new and more formidable Tibet — in exile.*

I read the manifestos and euphemistic explanations of the Chinese with an eerie sense of recognition: How many tyrants have twisted language like this, so that nothing means what it says, no one says what he means? The Chinese have given Tibet the deepest of class division in the mask of a classless society, the most blatant racism and elitism in the thin disguise of the proletariat and commune. The Chinese have made Tibet into a truly Orwellian world, where war is peace, and hate is love.

It is a commentary on our peculiar American blindness that this, one of the best books of 1984 and perhaps the most important, was denied the Pulitzer in favor of Studs Terkel's nostalgia for World War II. As we go about our business, the Dalai Lama goes about his, still campaigning — after thirty-odd years — to have Tibet restored to the Tibetans. I challenge admirers and students of modern China to read this book, and respond to its story.

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A side effect of Chinese immigration was the decimation of Tibet's heretofore strictly protected wildlife. In mass slaughters — reminiscent of the nineteenth-century buffalo hunts in the American West — PLA machine-gunners exterminated, for both food and sport, vast herds of wild ass or *kiang*. At the same time, Chinese settlers, who were always armed when they traveled in the countryside, hunted to the brink of extinction numerous rare species — including snow leopards, Himalayan monkeys, gazelles and *drongs* or wild yaks. When a group of over sixty Western scientists from seventeen nations was finally allowed to tour the region, in May 1980, they saw no large mammals and very few birds. Not even the once endless flocks of bar-headed geese and Brahmani ducks remained.

Fun with Chinese Characters

KEVIN KELLY: Every Chinese character was once a picture (or two) that later became a symbol. Along with a lot of practice, these marvelous picture books are the best route for learning to recognize these characters (also known as Japanese kanji). Through the imaginative brush of Singapore cartoonist Tan Huay Peng, the original meaning of each character is graphically and mnemonically sketched. Each word is played out as a picture story. Now those complicated, dense scribbles suddenly make sense.

Fun with Chinese Characters
Tan Huay Peng
(3 volumes)
1982; 1983; 1984
$6.95 each
($8.95 postpaid) from:
China Books
and Periodicals
2929 24th Street
San Francisco, CA 94110
or Whole Earth Access

The Reemergence of Matrifocal Myth & Legend

by Peter Warshall

There is a lovely renaissance of consciousness taking place. As recently as 15 years ago, the world of imagery was cramped with male divinities and superheroes: Moses, Muhammad, Hercules, Christ, the saints, David, Buddha, Krishna. Only the Virgin Mary seemed to hold forth in their company. Persephone, Eve, Mary Magdalene, Sarah, Rachel, Hecate — all existed but their stories seemed less clear, less powerful and, at times, downright evil compared to those simply divine guys.

There were serious and largely unsuccessful attempts to find goddesses and female divinities in the sixties. Abalone Woman (of the coastal Miwok), Kwan Yin (throughout Asia), the Green Tara and various Druid witches appeared to have momentary life among my friends, especially women friends.

Terracotta statuette, Babylonian, ca. 1900 B.C.E.

But there was a yearning to find sacred women, women whose historical powers appeared so great as to launch them into legend in the Anglo-European tradition. This was most difficult because male bards, scribes and politics have managed much of the information (sacred and profane) passed down in writing and song for thousands of years. But a few scholarly and thoughtful women have dug back as diligently and lovingly as possible, literally unearthing sources and stories from the matrifocal past in Britain, Europe and the Mediterranean regions.

Here are three of my favorites.

Lost Goddesses of Ancient Greece

Charlene Spretnak is the source and reason for this collection of books. She has pioneered the scholarship of pre-Hellenic (pre-Indo-European) myths, but not with a tedious academic prose. She does her homework and then re-creates portraits of the goddesses who ruled Greece before the Olympian takeover. The book is essential, then, not only to myth scholars, but to her daughter. It can be both academically accurate and a personal medium of passage. For many who read Jan Harrison's ***Myths of Greece*** *or Robert Graves's* ***Greek Myths*** *and felt "something" was missing,* ***Lost Goddesses*** *fills in that "something". . . . the harmony of all the forms of the Great Goddesses that dominated the Paleolithic Age for 25,000 years.*

Sarah The Priestess:

A book unfortunately written like a Ph.D. thesis — defensive, overly in love with citations, stodgy prose. But the thesis — that Sarah was a Mesopotamian priestess and the first to try to adjust to the new patriarchal Hebrew religion — is wonderfully original and thought-provoking. Minimally, it explains why Sarah, Rebecca, Rachel and Leah all seem so preeminent in ***Genesis.***

[Suggested by Charlene Spretnak]

The Mists of Avalon

The setting is meticulously described: The ascendancy of bishops, priests and their One God fighting with the Great Goddess of the Druid tradition of Britain; the need to unify the tribes of Britain to fight off the Saxons; the struggle of religion and politics through the loves of Arthur, Lancelot and Morgaine Le Fay. Perhaps the best novel written of the transition from magic-based religions to church-based Christianity founded solely on faith. The whole novel is boldly told from the perspective of the women. Jung once said: "The most we can do is dream the myth onwards and give it modern dress." The Arthurian legends have been dreamed onward.

[Suggested by Charlene Spretnak]

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"Listen to me, Igraine," said the Merlin. "I fathered you, though that gives me no rights; it is the blood of the Lady which confers royalty, and you are of the oldest royal blood, descended from daughter to daughter of the Holy Isle. It is written in the stars, child, that only a king who comes of two royalties, one royalty of the Tribes who follow the Goddess, and one royalty of those who look to Rome, will heal our land of all this strife."

•

The Myth of Gaia

Free of birth or destruction, of time or space, of form or condition, is the Void. From the eternal Void, Gaia danced forth and rolled Herself into a spinning ball. She molded mountains along Her spine, valleys in the hollows of Her flesh. A rhythm of hills and stretching plains followed Her contours. From Her warm moisture She bore a flow of gentle rain that fed Her surface and brought life. Wriggling creatures spawned in tidal pools, while tiny green shoots pushed upward through Her pores. She filled oceans and ponds and set rivers flowing through deep furrows. Gaia watched Her plants and animals grow. In time She brought forth from Her womb six women and six men.

Lost Goddesses of Early Greece
Charlene Spretnak
1978; 132 pp.
$6.95
($8.95 postpaid) from:
Beacon Press
25 Beacon St.
Boston, MA 02108

Sarah The Priestess
Savina J. Teubal
1984; 200 pp.
$8.95
($10.95 postpaid) from:
Ohio University Press
Scott Quad
Ohio University
Athens, OH 45701

The Mists of Avalon
Marion Zimmer Bradley
1982; 876 pp.
$8.95
($9.95 postpaid) from:
Ballantine Books
Random House
400 Hahn Road
Westminster, MD 21157

All available from Whole Earth Access.

Every Monday night during the late 1960s, a group of people met at Glide Memorial Church and the Family Dog Ballroom in San Francisco to discuss religion, drugs, the war in Vietnam, and the failures of free market capitalism. Those meetings stemmed from a class called "North American White Witchcraft" offered by a dope-smoking ex-Marine named Stephen Gaskin.

From those meetings emerged an extraordinary dream of building a new, classless society from the ground up. On October 12, 1970, Gaskin and about 150 others boarded 35 buses and traveled around the nation for nearly eight months. The caravan reached its final destination near the rural hamlet of Summertown, Tennessee. There, on 1,750 mostly wooded acres, the grand experiment they called the Farm began to rise.

Although the Farm is still settled by several hundred people, less than 40 members of the original caravan remain there. The rest have moved on. Two of them currently work for Whole Earth. I wanted them to tell the story of the Farm, since what they attempted was so grand, yet reports of its fate so meager. Many looked to the Farm as a New Age community that really worked. Yet the Farm seemed to be unravelling unnoticed. What happened?

WHY WE LEFT THE FARM

Former residents of the Long House on Stephen Gaskin's communal Farm. At one time the Long House lodged 40 people. In the back row, from left, are Kathryn, Matthew, and Daniel, three who speak here.

Eight former members gathered on two evenings for a taped interview. Walter Rabideau, one of the pillars of Farm society, was lead guitarist in the Farm band. He is now a housepainter in Petaluma, California. Susan Rabideau was one of the Farm's acclaimed midwives. Kathryn McClure is a registered nurse who was an early Farm midwife. Matthew McClure was chief editor at the Farm's Book Publishing Company. He became Managing Editor of the Whole Earth Software Catalog, *first edition, and is now sysop for the WELL. John Seward also worked for the Book Publishing Company on the Farm. He is presently vice president of International Technological Development Corporation in San Francisco. Susan Seward taught school at the Farm, and now teaches in Cotati, California. Clifford Figallo was in charge of several of the Farm's Plenty projects, including a reconstruction program after the 1976 earthquake in Guatemala. He was a researcher for the* Software Catalog, *and is now the bookkeeper at Whole Earth. Daniel Luna was a photographer for the Farm. He is currently a printing lithographer.*

From 10 hours of material, I edited the conversation roughly into its present state, arranging comments by topic rather than by chronology. The transcript went back to the group for their corrections. They rewrote delicate points for clarification. On the cutting floor is enough material for a fascinating book.

—Kevin Kelly

Matthew: We were the kind of people who came out of the drug experience of the Sixties, who acknowledged vibrations and other realms of existence besides the material plane. We'd seen the Vietnam conflict escalate and many of us had been teargassed in the streets. We'd had some kind of spiritual realization that we were all One and that peace and love were the obvious untried answers to the problems facing our society; many of us had given up our material possessions before we even met Stephen. That's the kind of people who started the Farm experiment.

Walter: It was more like an adventure to me. I didn't live in a house; I was already living on a bus before the caravan. I just fit right in. I got in line and was off.

AN INTERVIEW WITH EIGHT LONG-TIME MEMBERS OF THE FARM WHO LEFT THE RENOWNED GRANDDADDY OF NEW AGE COMMUNES.

Cliff: We started as a small group of people and then grew. There was almost an explosion out there on the West Coast, psychedelic drugs and everything, and pretty soon the whole country followed. Eventually, a lot of people quit taking acid, maybe went back to college, but they still had a place in their hearts for the hippies who were really trying to do it, really trying to give up material gain, trying to do it for the good of all mankind. That's what the Farm was — this group of people with these high ideals. One of the reasons for going to Tennessee was to go somewhere where we could actually practice those ideals and really try them out.

Walter: You have to picture it. The Farm was like a hippie dream — you didn't use any money, there weren't any cops, there weren't even adults. Everybody was your age. For some people that was really what they'd been looking for.

John: Smoke dope, grow your hair, do what you want.

Walter: Exactly. And it wasn't the best food, and it wasn't the best housing, but it was food and housing. Your kids were going to have a roof over their heads no matter what. Sometimes.

John: We were trying to create a society with a graceful lifestyle, one that wasn't too rich, where nobody would get hurt. We were trying to set an example for the whole planet. We were trying to arrive at a lifestyle that was within the reach of everybody in the Third World. We did everything we could to live as simple a lifestyle as possible. What we wanted to say was, We are educated people, we're graceful, we are comfortable (that was hedging), and you can be this way too, if you will only care about your brother enough to come down off your high horse and get rid of your Cadillac.

We were doing it, living communally, brotherhood, love, peace and all that, doing it for everybody. We built the biggest commune of the time — 1,500 people at one point, with a dozen satellite farms around the country. A whole bunch of people learned to grow food, and build houses, and we learned to live with a bunch of other people and what it was like to take care of your own medical trip. And doing it together made it so a lot of us could do stuff that we wouldn't have been able to do if we'd done it individually. If you had something to do, then you had the strength of a whole lot of people behind you to do it.

We saw the stuff our parents did in ignorance, and we didn't like it and we wanted to make changes. That's what we went looking for, and we found the Farm.

Walter: We were an extension of the Haight-Ashbury experience, which for a lot of people lasted about six months. I mean some people left their home, went out, took a bunch of acid, got clap a couple of times, whatever, and in a few months were right back in college. "Enough of that, whew!" What happened to us?

The caravan came from Monday night class, and the Farm came out of the caravan. The first spark was Monday night class, that being Stephen and a group of followers. We called ourselves a patchwork religion, if I remember. A lot of it was just taking the points of a lot of different religions that people were sharing in Monday night class. The real truth seekers formed the caravan. Those were the people who could actually get in a bus and take off and do that. I was one of those people.

I missed the meeting after the caravan returned to San Francisco where everybody decided to go back east. I got back and I heard everybody was going back east to Tennessee or Arkansas, or wherever, and looking for land. But I wasn't ready to go. I even went up to where all the buses were parked near the Oregon border before they headed east. I just walked among my friends' buses. Most of them were all married getting ready to go out and start

their families. Go back to the land and start a community and plant themselves.

But I just wasn't ready to go. So I went back to San Francisco and stayed around for ten months. I kept dreaming about the caravan, every night. Every night, I swear to God, I would dream about Stephen's bus and the Farm. And then my mother wrote me a letter and sent me an article she cut out of the Minneapolis *Tribune* showing people taking their first hoe to the ground and stuff like that. And she said: Why aren't you there? All your friends are. And it was true, that's where all my friends were. So I ended up going after about ten months.

The famous caravan of hippie buses shortly after it arrived in Tennessee.

Cliff: I was living with a lady (we later got married on the Farm), and she had bought a school bus because she wanted to go tripping around. She always had this fantasy that she would live in a commune with a bunch of people. At home my father was asking me what I was going to do with my life and I was telling him there were different alternatives, for example there's a group of people in these buses, and they're traveling around the country. So he picked up a copy of the Washington *Post* and said: You mean these people? They were on the front page. They were in town, so we went and visited them. They seemed like nice enough folks, parked in this parking lot in downtown Washington, all these buses, and strange four-marriages where two couples were married together. I couldn't quite figure it out, but the lady I was living with was determined to leave and do it. And she did. So I showed her how to shift gears in the school bus, and she drove on out and met up with them in Nashville.

I finally got bored after a month. I took a Trailways bus across the country, and became an overnight hippie and an overnight vegetarian. For the next 12 years, I didn't cut my hair or beard. I caught up with the caravan in Los Angeles. Then we took this caravan of buses up the coastal highway to San Francisco. We were maybe the thirtieth or fortieth vehicle in a row and there were another 20 vehicles behind us. We'd come upon hitchhikers and blow their minds. By the time we got to Tennessee it was closer to 100 vehicles. We'd pull into a state and the state police would meet us at the state line and escort us to a parking place where they could put us. They really didn't know what to do with us. They wouldn't even let us stop in Kansas. They escorted us all the way across the state and dumped us in Oklahoma, where we finally got to park.

Eventually we pulled our buses up to some land. We met somebody in Tennessee who let us stay several weeks in campgrounds. Then we sent out parties of buses looking for land, and they'd all get treated like visitors from another planet.

Finally, we had to chainsaw our way through some godforsaken rattlesnake-ridden woods and we stayed there for a few months until we bought some land right down the road. We moved onto it with the school buses. Everybody lived in school buses. A lot of the single people just moved out into their pup tents or little plastic shelters and spent the rest of the fall there. For the first two winters we lived in a school bus, which often was impossible to heat. You'd wake up in the morning with icicles.

Walter: I got there on probably the coldest night of the year, sometime in November. I slept in a lean-to with a floor of poles and saplings for my bed. I didn't have any mattress or anything. I was in a flimsy sleeping bag, it was 12 degrees, and I did not sleep one wink. But I was there.

It's really hard to just say what the Farm was in a few sentences. It was a real experiment in living, a whole new thing. In some ways, of course, it had been done before — there were the Amish and other religious groups — but this was a modern-day bunch of people who were ex-college students. There were professionals and nonprofessionals and everybody mixed in together, and the reason they were there was that they all took psychedelic drugs. If that hadn't happened, the Farm wouldn't have been there.

Matthew: I believed that we were a demonstration, and that there was a possibility we could serve as the seed that might possibly spread so people might get the idea. I thought that if we could be a good enough and clear enough example we could show people that there was an alternative way of living. And I tried for a good 12 years to put in everything I had to make the world recognize the Farm as such a place.

Walter: I think you had to have completely lost all faith in America, the whole straight society, and everything else to go do something like the Farm. We were saying everything was so totally fucked that you couldn't do anything. You have to start absolutely from scratch with a piece of bare dirt and build everything, including your culture, out of

You had to have completely lost all faith in America, the whole straight society, and everything else to go do something like the Farm.

whole cloth. And you wouldn't do that unless you just had a totally apocalyptic vision brought on by the war in Vietnam and lots of acid. And that's an unusual combination.

After a few years, by the mid-70s, the Farm got to be known as THE place to go, especially in the summertime, when we got all the hitchhiking people, people without homes, the free- lancers, the free spirits. They were all out there and the word started getting out.

We were getting 10,000 to 15,000 people a year (ten times our population), coming to visit the Farm, many of them just driving through on Sundays. The Farm was sealed off except for one entrance. That was the gatehouse — our front door. It became evident to us after a while that we were getting all kinds of people, from serious seekers to ripoffs to people who had just escaped from prison, so we had to have a group or crew of people manning this entrance 24 hours a day. That somebody kind of became the sheriff of the Farm. The gate crew had a four-wheel drive vehicle and access to money they could use to escort somebody off to the airport. I went on a few of those runs; we were called "stout monks." We'd buy them plane tickets, bus tickets, whatever, just to get them out of the state.

John: The first time I was head gate man I had two drunk Tennesseeans try to ride their mules into the gatehouse. They got up on the porch. Never knew what was going to happen.

Cliff: We attracted anybody. We had guided tours for local Tennesseans as one of our community obligations. We had to have enough people at the gate to do that. After a while you got so the spiel just kinda rolled off your tongue about what we were doing.

Kevin: Let's say I'm a visitor from Nashville and I want to know what you guys are doing.

Cliff: "You're from Nashville? Well, we are a spiritual community, a group of people who decided to live together in a lifestyle that everyone could attain in the world. It's a way where things are evenly distributed, fairly distributed. We don't think it is fair for the whole population of the planet for some people to have so much and some people to not have anything. We think that if you cooperate you can figure it out peacefully and be nonviolent. We are vegetarians, we're totally nonviolent, we don't allow any guns, and we don't even think it's cool to be angry with each other."

Walter: I remember working at the gate, being one of the people somebody would have to visit if they wanted to join the Farm. I would be one of the ones saying okay, are you sure you really want to live here because this is a big commitment and you have to take Stephen as your spiritual teacher. I really checked them out. If they flinched, I let them know right away to forget it.

But some people would know that if you said the right things you could stay. You got to stay for a month before you'd be asked to make a decision to live there or leave. They would stay and get about six weeks of free medical care, a roof over their heads, dope, friendly hippies, and the word was out that this was the place.

Kevin: What was the catechism they had to say?

Walter: First of all you had to say you wanted to check it out. If you got by that, that was like two days. After two days you had to say you wanted "to soak." That was the big one. You want to soak. You could soak for one, two, or three weeks. Then you'd come back after that period of time, and you'd say you weren't really sure and you'd ask to soak another week. We called those the "soakers." Then at a certain point you'd have to go to a soakers' meeting and decide whether you're going to sign on or split. So a lot of people would wait right up to that soakers' meeting. It would be a Thursday night and there was going to be a soakers' meeting the next day, and something like 30 people would be staying overnight at the gate. Come next morning, they're checking out, headed back to Colorado, or whatever. Only about a handful would end up at the soakers' meeting later that day. For a lot of people there was no way would they make a commitment to stay, but it was a way they could hang out with the hippies, and get free meals. That was a big part of the gate.

Daniel: The weird people whom nobody would accept in their houses would stay at the gate and that was as far in as they could get. And so when you did gate you'd have a houseful of the weirdest people who had come to the Farm that week or month, people who couldn't find places, couldn't find any friends or anybody that even liked them. And you have to integrate all those people and deal with that while at the same time you were the official public relations person for any media, notables, or dignitaries.

Walter: You would be handling some total crazy and they'd be just going bananas, and then *Time* magazine would show up. Or some locals, all dressed up, would pop up and say they had been waiting 11 years to come out here and they had finally decided to see what it was all about. And while they're waiting there you're trying to keep this nut at bay.

Kevin: Would you actually turn people away?

Cliff: Yes, but only if they were the real yahoos

who were there to see if the ladies really were bare-breasted all the time or something, which they weren't.

Matthew: Some of the people who came and stayed were the blissed-out flower children schizophrenics who just didn't want to work but were going to get fed anyway. One of the things Stephen advertised was that no matter how crazy you were, if you came to the Farm, he'd make you sane.

Kevin: Did it work?

Walter: Sometimes. He appointed a buddy for people like that, a 24-hour person to be with that person all the time. Stephen would talk to them for five minutes, and get stoned with them, and then turn them loose on the Farm. He'd hardly see them for years, while they drove hundreds of other people insane.

An unusual moment at the Farm's gatehouse — there's not a person around. All traffic, in- and outbound, was monitored through this pass.

Daniel: He would see them again when everybody was ready to throw them off the Farm. They would go to Stephen, and he would get stoned with them again and then he would give them another two days!

Matthew: We'd always have at least one psychotic living in our house. I mean one full-blown, total, blissed out freak who would've been in a mental institution if he hadn't been on the Farm. If you were a "together couple" then you were responsible for all the untogether couples. You had to work out their marriage, and you had to work out their problems. There were always a couple or two in our household that we spent our Sundays being amateur marriage counselors for.

Walter: We had couples that we were given as a project, as our civic duty. You'd get Joe and Mary, a couple who had burnt out about six households over several years' time. They were obviously not together. After much hard work, it ended up with him throwing a suitcase through our window. What could I do? It was a constant psychic circus.

Kathryn: You'd have maybe two couples in your house that were reasonably together (if you were lucky), and then you would have at least one or two people that were kind of difficult. And if for some reason or another one of them would move out, then that day the Housing Lady would call you up and give you a list of more tripped-out folks she wanted to move into your house on the spot. You never got a break.

Matthew: And she would always start off with the most tripped-out folks, and if you'd say, no, I can't possibly take them, then they'd give you the next one down. You went from zoo to zoo.

Walter: I added up the list one day and I came up with something like 250 and 300 people that I had lived with in one house over the course of several years. I decided I had to call it quits somewhere. I had to raise my family in some kind of peace and quiet sanity.

John: We prided ourselves on our anarchy. But we did experiment with self governing and were continuously trying different committees, boards, and directors. And of course there was a way that things actually worked, which was its true economics and politics, but it was never talked about or codified. And it wasn't the way we said it was. We were organizing ourselves as if it were the Garden of Eden, as if we were in some kind of state of innocence. So you don't need government.

We eventually invented a governmental board when a guy on the farming crew found out he could get bank loans and just did it. He just kept putting the paper in his back pocket. It turned out that we had borrowed a half a million dollars that we couldn't pay back, and nobody knew it. Nobody knew it had even happened. We had a meeting and said here's a chart with a big blackboard. Okay, now we're $600,000 in debt.

Walter: We took vows of poverty. We were a modern-day collective. I used to live in a commune in San Francisco and there was always this bickering over food in the refrigerator. Everybody had their names on the chocolate milk or this and that. But we didn't have to go through those kinds of things. We didn't have to share the rent, and that kind of stuff. There were no refrigerators, and there was no chocolate milk!

John: That's what a friend of mine on the Farm used to say. He said he'd taken all this acid and then the next thing he knew he was out in the middle of the woods and his refrigerator was gone.

Susan: Oh, I love my refrigerator! I love my dishwasher, that's my favorite. I think the Farm was a nice two-year experiment that lasted 12. It would have been a great two-year experience.

Cliff: Yes, really. During our Farm days we never went to the store shopping for new clothes. We never went to the movies or spent money to go to a concert. We went around trying to sell our products,

I think the Farm was a nice two-year experiment that lasted 12. It would have been a great two-year experience.

but we would never spend money on ourselves that way. We thought that if everybody conformed to the agreements, the magic would happen. If you didn't, then the spell would be broken, and it would all fall to shit. So, boy, would we be tempted, but we just never did. We were such good soldiers.

Matthew: Our supplies came from the Farm store. There was no money involved. You went there twice a week; the store would get your order for whatever it was depending on how well the Farm was doing that week. There was no way to know how much oil you would get. Same with flour, same with sugar, same with salt. I can often remember having no salt on the Farm, or toilet paper.

Kevin: Who determined how much everyone got?

Walter: All depended on how much money the food buyer could get from the Bank Lady for that week. The Bank Lady became one of our most powerful institutions — the position rotated, but whoever had it controlled the Farm's pursestrings. The food buyer would put in her order; she'd say she needed about $1,500 worth of food, and the Bank Lady would say all she could give her is $800. So there is the store person doling out a quarter-cup of sugar per person. Sorry, I can only give you an eighth of a cup of oil per person this week.

The Bank Lady had a hard job. Everybody would come to her begging for money that they needed for absolute necessities. She would be the focus of all that, but she didn't have any control over how much money she had to distribute.

John: When I went to the Farm I thought: This is great! I didn't have any money, and I didn't have to think about money, No money passed hands for the first two or three years I was there. I never thought about money, I never touched money, I never had anything to do with money. Then later I wound up having to concern myself with money, and for the last three years on the Farm I never thought about anything but money.

Walter: Here's what would happen. We tried to get some shoes for our kid. Toes coming out the ends of the old sneakers, right? We have to get shoes. Finally we'd get ahold of the Shoe Lady after calling her for five days and we'd tell her we needed shoes for the kid. "Okay," the Shoe Lady would tell us. "We'll put you on the list. We're going to do a big buy in a week."

'Well, you see, I'm going into town, couldn't I just go in and get some?" we'd ask. "I think K-Mart has some for $2.50. I know I could get a pair right there."

"Oh, no, I think it'd be better if we just got it in the big buy. We're doing a big buy on let's see . . . next Thursday."

So we'd wait till next Thursday, then call again. "Nope, the car broke down, we couldn't make it." Days later, the shoes would finally come in, but the Shoe Lady would tell us, "Oh, no, somebody came in who really needed size 3 so we gave yours away. We're gonna do another run next Friday," or something. After enough of that you just kind of go bonkers.

I just didn't believe in the system any more. I started buying my kids' shoes on my own for the last few years. I just avoided the whole system. I'd go out and work Saturday, save the money, take the kids on Sunday, and go to K-mart or someplace.

John: An institution developed called "Saturday money" which meant you could be a capitalist on Saturday. If you went and got a job off the Farm on Saturday you could keep the money. At first you could only spend it on houses, but then it got to where you used it to get shoes.

Kathryn: You'd have no oil, you'd have no margarine, no baking powder sometimes, yet you couldn't complain. You were insufficiently spiritual if you complained about the material plane.

Daniel: So you'd pocket a little change and go to town and buy something. That's what eventually happened. It was the only way you could provide for your own.

John: Graft and corruption. Capitalism.

Walter: In the later years, there was more of a double standard going on, where some people took advantage of their opportunities. It was a matter of survival to take advantage of whatever connections came your way.

Kathryn: At the gate you'd get real nervous and you'd sweat if you were going into town to get some margarine or to get a soda. You'd get to the gate and you'd have to tell them where you were going, and you couldn't tell them what you were doing. It would feel like changing money on the black market of Czechoslovakia.

Walter: A lot of times I would know the gate man. I'd go up to him, and say we're going to do a "town run." When I was the gate man, I'd just put town run, town run, town run for all these guys going out to get sodas.

But you had to be careful, because the gate wouldn't let you go out if you had too many kids in the back of the pickup or something, because it'd

Ina Mae put out the word to the nation at large. Hey ladies, don't have an abortion. Come to the Farm, and we'll deliver your baby free! Over 1000 babies were born on the Farm. We delivered all those babies for free.

look bad with the neighbors, so you'd call up the gate and find out who was there, and if it was somebody you knew then you could do it. If it wasn't you'd have to figure out some way to get by.

Kathryn: The last year we were at the Farm somebody gave a bunch of money to buy the Farm a nice meal for Christmas day. So we bought noodles and oranges. While we're eating noodles, Rose, our daughter, said, "I wish we could have noodles sometime besides just for Christmas." And I thought, my God, that's really pretty bad. I was working at the hospital in Lawrenceburg, a small, pretty poor local town, and the patients there always had noodles. It made me sure we had to leave.

Susan: Ten-year-olds and eleven-year-olds were raiding the food stashes to get some oranges that were reserved for the babies. They weren't bad kids, but that's what they had to do.

Daniel: The peasants of Guatemala who we were trying to help would say they had vegetables all the time. They'd come to the Farm and they'd decide they had it better down there.

Kevin: Was Stephen getting more?

Matthew: No, he wasn't. But he was on the road a lot, and didn't really experience the day-to-day deprivation of life on the Farm.

Cliff: We had to volunteer to have less in order to have a cooperative thing happen. In a situation like Nicaragua it might work out fine to do a cooperative thing because everybody would feel like they were all gonna raise their level by being cooperative. But we lowered our level by being cooperative, we lowered our standard of living, and it's hard when you start raising kids to face the fact that you've voluntarily lowered your standard of living.

John: Collectives don't work, basically, for all the classic reasons. One of the main reasons the Farm was collective was that Mao was so popular in the counterculture at the time.

I don't believe that a real pure collective could work unless you were some tribe in which everybody had been related for 2,000 years. That was one of our mistakes. We called ourselves a tribe, but we weren't. We were all totally unrelated people trying to be a tribe, but we weren't.

Kathryn: I agree. For example, we shared what cars we had on the Farm. When I was working at the hospital off the Farm I'd have to drive different cars in to work and they were always dirty and full of trash and junk. And I thought that if everybody were taking care of the cars as if they were their own cars, like we were really supposed to be doing, it would work. But it wasn't like it was everybody's car; it was like it was nobody's car. So nobody took care of them.

Kevin: What were the Farm's economics?

Matthew: There were three cottage industries we were hoping we could make a living with. One was solar electronics and TV satellite dishes, another was the Book Publishing Company, and another was Farm Foods.

Cliff: Our first year we built a sorghum mill to make sorghum molasses. We called it "Old Beatnik Sorghum Molasses." We cut sugarcane, just like the Venceremos Brigades in Cuba. Machetes and cane knives. All the kids and everyone would pile in the trucks and go out to the fields, cut sorghum cane all day, and bring it back to make Old Beatnik Sorghum Molasses. That lasted for the first three years, until we realized that wasn't going to do it for us.

Matthew: We didn't solicit much, but people often just sent in money. "Donations" was just the bookkeeping term for inheritances, because we were a commune and everybody turned in all their stuff. So some people put more than $100,000 into the Farm because they had a trust fund that suddenly became due.

John: We used up a big chunk of some people's inheritances just buying and running the place. That embittered those people, because if they were going to put in money they could have used to fix themselves up, they wanted at least to see some permanent changes made. But usually we would get to a financially desperate time and their inheritance or trust fund would mature, and we'd eat it. We'd go and buy food and it'd be gone. $60,000-$100,000 was shot. And we had all these plans — we're going to fix the roads, we're going to fix the school, we're going to build a community center, we're going to . . . But those projects never really got funded unless they were like the bumps in the roads, which were cost efficient to fix because vehicle repair costs were so high.

Kevin: Well, I don't understand, if everyone was working so hard how come you didn't have a road and whatnot?

Matthew: Everyone wasn't working so hard. Only a couple hundred or so were really earning money. There were 1,500 people there at one point, about half of them children.

Daniel: There were always only 40 or so guys who

were supporting the Farm in terms of cash, but we were still getting more single mothers, still more psychotics; and those same people, who once were supporting maybe 600 people, five years later were supporting 1,500 people.

Walter: We weren't covering the bases. We weren't feeding ourselves. The medical care was marginal. There were no boots for the kids in the winter. Roads were so far down the list of priorities that they never got much attention. That's an example of one thing that discouraged and frustrated a lot of people — after ten years there, we still had funky dirt roads and poor sanitation.

We were providing homes for lots of people who needed them. And a lot of Farm people had really important jobs, life-and-death situations all the time, midwives out delivering babies in the middle of the night by kerosene lantern and stuff. Over 1000 babies were born on the Farm — more than half were from people who didn't live on the Farm. We delivered all those babies for free. Ina Mae put out the word to the nation at large. Hey ladies, don't have an abortion. Come to the Farm, and we'll deliver your baby free!

Kathryn: We probably saved a few babies' lives that way. But that also meant that at one point one-quarter of the kids on the Farm had been dumped there.

Walter: We'd have all these pregnant couples come to the Farm six weeks before they were due and at no cost, not even room and board, we would support them for six weeks before birth and sometimes a month or two after the baby was born.

Kathryn: I used to have a hard time when Stephen would want to take a bunch of the Farm's money to go on tour with the Band, or when the Book Company would spend thousands of dollars for a phototypesetter, because I worked in the clinic and knew that there was a list of half a dozen people needing hernia repairs who had been waiting for two and three years, or people needing new glasses and having to wait years for them, or get them through the grey market of money from their parents.

John: We weren't really building a community like we should with proper sanitation, housing, a good school and the kind of things that we needed, but we were taking on all these welfare cases. Stephen would talk on Sunday morning about how you can't close your heart, don't get square, because with the good karma, doing good deeds, it'll balance out and blah blah blah. But it didn't really work that way.

Walter: We overloaded ourselves and took on more than we could handle as a result of Stephen's pep talks. You'd look at all the stuff that was wrong and you'd think, "If we just hang on, this is all going to get fixed. We can't quit now. We've already put eight years into this."

Susan: Stephen would tell us, "You can't close your heart or you're not being sufficiently spiritual."

Our hearts weren't closed; we were just overcrowded and didn't have enough to eat.

Matthew: A lot of it looked like it was just economics, and if we could only make a little more money then most of our problems would disappear. I remember Stephen saying once that we were among the few people in the world whose problems would all be solved by money.

But there wasn't much left of the original high spiritual stuff.

In the Farm's early years, sorghum was hand-cut and manually loaded onto carts to be mashed into Old Beatnik Sorghum Molasses.

Kevin: Where'd it go?

John: It went into the reality of life and economics.

Cliff: You can't take acid forever. You can't just keep taking it forever. There were a lot of people on the Farm who didn't know what they were going to do next. Some people had rich families who would send them money, and they were able to maintain an acceptably comfortable lifestyle. A lot of people didn't. A lot of people like me had been written off. My parents didn't want to send any money to the Farm. They thought it would all get communalized, that Stephen would get it all. So I was cut off. I didn't have any source of funds to fix up my house. At that point, when I saw how much it was going to take to get it together, I started realizing that the Farm was on a downhill slide, and that the system was kind of a loss.

Susan: We made the mistake of thinking we could actually take on and help people before we were even helping ourselves, before we had enough for our own families. Some of that came from one of Stephen's main spiritual teachings: Believing your kid is better than anybody else's is one of the roots of racism. You couldn't think more about your kids than you did about all the kids in the Third World. ►

And on a level, that's how it should be. I mean kids are kids; they all need food, they all need everything. But your own kids are right here in front of you, and they don't have boots.

Matthew: My kids were one of the main reasons I left the Farm. I arrived at the decisions that put me on the Farm from a fairly informed place. Yet on the Farm that same set of information was not available to my kids. Our kids were programmed to think along these revolutionary Third World lines, which may or may not be bad, but I'd prefer that they had this along with the same kind of information that I had, which was a pretty global perspective. I tripped around in Europe, and I'd been to Stanford and I was exposed to all the intellectual highlights at the time. Seeing all that, I made a choice to drop out and go be a hippie.

Matthew and Kathryn McClure (who married on the Farm) with daughters Rose (left) and Grace, 1975.

But for the first 12 years my kids only saw the Farm and hippies. They didn't see anything intellectual; there was a strong anti-intellectualism on the Farm, stemming from Stephen's teaching to beware of "conceptual thought" at the expense of real experience. Our kids didn't have any real concept of internationalism, because they'd never been outside Summertown, except when we went to the grandparents for a vacation. They were seriously culturally deprived — they didn't know how to make change or call information — and they were as far from real planetary consciousness as they could be, in spite of the way we were talking. As the kids started growing older, it became obvious that the education they were getting was inadequate in part because of the atmosphere of anti-intellectualism on the Farm. I wanted my kids to have the material wherewithal they needed to arrive at a spiritual decision that they could live with.

Kevin: Would you say the demise was a spiritual demise?

Matthew: I think it was. I think it's really important to recognize that Stephen at least professed to think of himself as a fully enlightened spiritual teacher on a par with Buddha and Christ. The avatar of the Aquarian Age.

We learned a lot of spiritual skills. The experiment was to find out how many people's minds can you mesh with yours to become one mind.

Kevin . . . What's the answer?

John: I still think it's infinite.

Kevin: When did you stop believing that Stephen was the guru?

Walter: That's a good question. It was real gradual. I guess one of the real big turning points was when Stephen became the second drummer in our band. I saw that he wasn't a fully enlightened drummer. It was so obvious that he was so wrong. I mean rock'n'roll's pretty basic, if you can count to four. He couldn't make it from one to four without screwing up in the middle. But he insisted on playing drums. I couldn't find ways in the most simple musical terms to explain to him how to correct it. Even when I could figure out how to say it, I couldn't get the words out of my mouth — I would just get choked up. He had a tremendous power over vibrations in the room; he was a teacher of truth. And, the strange phenomenon that I started to realize was that you couldn't tell the truth to him if it was about him! In the greater context of the Farm, there was an "Emperor's New Clothes" mentality that kept people from saying what was obviously true when it concerned Stephen.

So I found myself over the years just kind of getting in this situation where I would be constantly compromising myself, agreeing with stuff that he would agree with, like the drums for instance. I would just put up with it, looking the other way when stuff was just obviously not right, but because he thought it was neat, it was okay.

If somebody asked me what I learned from the Farm experience, I would say I learned to kiss ass. To keep my position in Stephen's inner circle I had to learn what to say, but more importantly what not to say. For me, Stephen went from being the best friend I had to being someone that was impossible for me to talk to.

John: The Farm was a diversion of energy in a lot of ways. That energy got diverted to Stephen and taken to Tennessee and isolated so that it continued going while the rest of that culture died, evolved, and went on. There were a bunch of things built into the Farm that made it so the Farm couldn't learn from its mistakes. If we'd been able to learn from our mistakes and evolve it'd still be happening.

If anyone indicated anything like doubt Stephen would always put it on them that they were not

The worst thing about the Farm was that people learned from experiments, but then the change was not allowed to happen. The Farm couldn't learn from its mistakes.

only lacking in faith, but also that their doubt was going to make it impossible for the rest of us to make it. What that meant was that anybody that had doubtful thoughts running through their head was in fairly short order forced to split, because you couldn't maintain that feeling and stay there without bringing everybody down. So there was never any big impetus to radically change how things were because anybody that started thinking that was just steered out.

Daniel: It was like you were on the bus or off the bus.

Kevin: What other kind of things would you design into a Farm so that it could learn from its mistakes and correct itself?

John: No gurus. The worst thing about the Farm was that people learned from experiments, but then the change was not allowed to happen. If there started to be a growing feeling that maybe we shouldn't all live crammed together, that maybe we shouldn't keep taking on new people, or maybe we should do this or that, then the people that started feeling that would get squeezed out of the Farm and forced to leave, rather than have that create a change in the Farm. Because in spite of Stephen's embracing of the motto, "Question authority," we were institutionally not supposed to think for ourselves in some areas. We weren't allowed to change.

Matthew: I think another problem the Farm had was our youthful arrogance, multiplied by the power of the psychedelics that we took, multiplied by the power of having that many people all doing things in unison. Because we had the temerity to think of ourselves as a microcosm of the entire planet, we believed we should allow anyone with a belly button to come in and live on the Farm. But if I were going to do a Farm, I would be selective. I would only let a certain few people in. I would restrict the number of Looney Tunes to about zero. People I was comfortable with sharing my mind intimately, I'd let in. People who wanted to come in and share my mind intimately that I wasn't comfortable with, I would run from, rather than let them come live with me. And I think that was a central problem that we had, that the gate in a way had low standards for what it would accept. In a spirit of compassion, the Farm in its youthful arrogance tried to do too much by trying to take on too broad a spectrum of people.

Kathryn: You always thought the thing was wrong with you, not with the Farm or what was happening. If you felt doubt, it was something wrong with you. Toward the end we started to figure out it wasn't us — we were right all along.

Cliff: For the Farm to keep growing, Stephen had to not be the up-front guru. It would have worked much better if Stephen had realized that he was a catalyst and then had stepped back and let the action happen. One of the things that I appreciate about Stewart Brand is that he'll start something and then step back and see what'll happen with it. Sometimes it falls flat on its face, sometimes other stuff happens, or it evolves into something else. And at that level the Farm is evolving into something else.

Walter: As I understand it now, things have changed, and they seem to be doing a little bit better. Their population is down to around 280. It isn't a collective any more; it's a cooperative. People are working for themselves. Independent families in their own houses on the land, which is just about paid off. It's not really the Farm any longer.

Kevin: Would you say the reason why the Farm isn't significant now is because it helped accomplished the goals of the era so there was no more need for it?

Matthew: Oh, no, no. That's wrong. The goals of the era have not been accomplished. The same people are in power and they've consolidated their power since the Sixties. They've gotten smarter. They saw the way that the revolutionaries acted, and they found ways to channel the revolutionary energy so that it wouldn't be dangerous to their power structure. The way things are now are in many ways parallel to how they were in the Sixties, except the oppressor is smarter, better equipped, and more popular now than in the Sixties. It's going to take another five or ten years before the people get the idea of what's going on, if they ever do.

Kevin: You think then that some other generation might decide to try a vision like the Farm again?

John: Yes. Sooner or later it's bound to happen.

Kevin: What kind of advice would you give them?

John: Loosen up. Don't follow leaders. Don't take on more than you can handle financially. Get enough money together before you start.

Kevin: It sounds like starting a business.

Matthew: It is. Or starting a marriage. It's often not a good idea to start off in poverty. ►

On a wintry Tennessee day, Stephen Gaskin gives his Sunday Morning Service, the Farm's equivalent of his Monday night class in San Francisco.

John: Another thing I wouldn't do is have the idea that you are somehow responsible for the whole world. Everybody on the Farm carried around the idea on their shoulders of being responsible for the whole world. Every act, everything you said, everything you did, the way you lived, the way you dressed, everything was having a vast effect all over the planet, and you had to take that into consideration all the time. With everything you were doing! I think that's nuts. And this was also another thing that prevented us from trying a lot of things.

Matthew: All of us there believed that we were in fact the hope of the world, that if anything happened to that small group of acid heads the world was going to collapse. . . .

Kevin: Did you really believe that?

John: Oh, yeah. I totally believed it. Stephen would come and say that every Sunday and I believed it. I believed that we were keeping it together for the entire world because we were a demonstration that people could live together in peace and harmony. I mean nobody would have gone there if they hadn't believed that.

The Farm was formed around Stephen being some sort of guru. That was a mistake. But then the Farm saw itself as being the guru for the rest of the world. It didn't succeed in transforming the world because that was a mistake. It was a mistake the way the Farm was organized around Stephen. And the Farm's attitude concerning its relationship with the rest of the world was a mistake. I don't think that kind of movement ever has lasting effect, whether it's the Farm or any other thing like it. I would never do that again.

Walter: The mistake was in giving Stephen so much control over our lives. It was several years before we realized what was happening. But he was the founder, and we did agree to start a community following his spiritual teachings.

Kathryn: We were faced more with the hard-core reality of how you have to live. You have to raise your kids, you have to feed them, you have to clothe them. It got to the point where just day-to-day living was so difficult that trying to have a good time, or at least not to have a horrible time, and still get the laundry done today, was starting to loom larger than any spiritual ideal.

Matthew: You can't be hungry and help somebody else. You have to be together and smart and well fed and know everything in your home is taken care of before you help others.

Kathryn: Well, that's what we always said, and then we never did it.

Walter: But I think we all agree that the friendships and camaraderie from the Farm were some of the most valuable things we have. The Farm created a lot of deep and lasting friendships that we'll all treasure for years — there was a very strong bond among those of us who spent all those years trying to make it succeed. A lot of people worked very hard, and I hope their efforts will be respected. ■

ASSASSINATIONS

by Anne Herbert

Periodically, a summing up of where we stand — as a nation, and as a culture — is in order. For better or for worse, Rolling Stone *used to provide such commentaries, though were it to do so now, few would probably listen. Year-end issues of* Time *hardly suffice, and the less said about TV summaries the better. Anne Herbert reinvigorates a lapsed and much-needed custom with this heartfelt sum-up of our current political juncture. The crises of today are the descendants of yesterday's deaths. We are the orphans of the Assassins' hands. —Jay Kinney*

A woman in Elizabeth, New Jersey, was killed by Bobby Kennedy's funeral train as it travelled between New York and Washington. Ran onto the tracks, got crowded onto the tracks, wanted to get a good view and forgot that this was real life, not television—who knew? She was dead. Ethel Kennedy wrote her family a note, or was it that Ethel Kennedy called her family on the phone? What difference did it make, but, what, after all, could Ethel Kennedy do who had problems of her own?

Continuous all-day, all-night coverage of assassination aftermaths often gave me facts I didn't know where to file.

The funeral train went much slower after that, and my afternoon went slower and other people's as we watched live television coverage of almost nothing happening in real time, slowly, slowly. I stored the dead lady in Elizabeth, New Jersey, in some confused place in my mind. She's still there on October 3, 1983, 15 years and 112 days later. That's a guess. I know that Robert Kennedy was shot on June 5, 1968 and died on June 6, 1968, the 26th anniversary of D-Day. My knowledge of assassination funeral rhythm would lead me to believe that his funeral was two days later and that would be when the lady died. Her funeral was probably two days later than that, June 10, untelevised.

I would like to know how you feel about this woman because it might give me some clues as to how I feel about her.

I'd like 3 days of national mourning for Karen Silkwood sometime soon. Me being sad and the tv being sad and people I don't know on the street being sad. TV faces telling me minor stories of her life and her family to make her more alive for me so I can truly feel her death.

Karen Silkwood, like the Kennedy men, was mostly potential. Ah, what they might have done for us! What they almost maybe did that we can't do now that they are dead. Shall we hide our cowardice in a search for who really killed them? Or shall we not search, but relax into cynicism?

Robert Kennedy's funeral train got to Washington much later than had been planned because it had travelled so slowly. The line of cars with his body moved down Pennsylvania Avenue toward the Capitol in the dark. People lined both sides of the street after "waiting patiently for hours through this hot muggy Washington afternoon into the evening, united by their great grief at the loss of this vibrant leader." You can be sure the tv men said something like that over and over. An ever-present effort of assassination-funeral watching was blanking out the banalities of the commentators to try to feel what was really going on.

When Neil Armstrong stepped off the ladder and onto the Moon, he said, "That's one small step for man, one giant leap for mankind." That didn't quite make sense. He is always quoted as saying "That's one small step for a man . . ."which does make sense. It's ok by me that he was nervous and blew it a little, but it makes me nervous that the single sentence heard live by more people than any other single sentence, is always rewritten without comment when quoted. If news people like you, they'll make nice nice for you every time.

I went to a first-aid class and learned that when the brain is deprived of a certain amount of oxygen the vomit control center goes and you puke. That means a good first-aid thing to do is to keep clearing the person's mouth out so they don't suffocate on their last meal. That means, I think that means, that the decision to report in the newspaper that someone died choking on their own vomit is a political decision. Means the gang in the newsroom does not approve of your life and digs your death. Because there are many ways of losing oxygen to the point of puking. I bet a few withered old statesmen who had strokes when alone died choking on their own vomit. But it's for Janis and Jimi we hear about it—they died of living, bless them all.

An aerial shot of Pennsylvania Avenue showed the limousines crawling along as people on both sides took flash pictures of the cars. If the pictures had come out, they would have showed part of a moving black car. But the pictures wouldn't come out. None of them. The flashes didn't reach the car. You could see the flashes going off, making little pools of light at the side of Pennsylvania Avenue. The pools of light were never large enough to touch the cars. Flash cubes don't have much range.

Seemed sad at that moment, most things did, and reminded me of how often people don't say the really relevant fact. I'd seen big performers, million dollar communicators, try to charm and scare their audiences into not taking flash pictures because they distract the performer and the other people in the audience. Never heard a one mention—"Don't use your flash 'cause it won't work. Look at the size of the bulb. Look how far you are from the stage. Think."

Thinking seemed hard when I was a kid because of the missing facts. True stuff nobody said. A world made of missing facts. Assassination coverage could be almost continuous for three days and skip a lot. Bobby Kennedy had a great smile and talked to Cesar Chavez sometimes and was a hatchet man for the anticommunist witch hunters and planned the Bay of Pigs, an operation both immoral and unsuccessful, and didn't have the guts to run against President Johnson until Eugene McCarthy had done the hardest and bravest work.

There was a lot to mourn for when Bobby Kennedy died, not least and not mentioned was the fact that so many of the hopes of a hopeful and desperate time had come to rest on a man who acted exactly like a charming opportunist.

The Kennedys were learning, their funeral coverage reminded us. John was learning to be president, Robert was learning to be antiwar. After McCarthy risked his career to find the millions of antiwar votes, Robert learned to want peace really fast.

Store not your treasures in someone's personality where they can be shattered or shot to bits. Store them rather—where? In Heaven, if you know the address. In your heart? Imagine we're all leaders.

I miss John Lennon, a confusing public figure I was fond of on the periphery of my life. I miss him because he was such a mess—sending up flakey smoke signals, releasing quirky albums, being dumb in public, singing the one thing that most needed to be sung, sometimes. He wasn't anybody's pet symbol while he lived because he was so naturally not what you expected. He kept trying. He wasn't running for reelection and keeping the reelection contract to never get more than a quarter of an inch ahead of what the people's imagination can handle. About the fourth goddamn I said after I heard Lennon was shot was "Goddamn, he'll get holy now and frozen. There's no way to stop it." Now we've made up our collective Important, Serious John Lennon while he's pissing in the nurse's eye on purpose in his next incarnation.

Lots of people get shot on city streets. When I heard he was shot but not the story, I wanted Lennon to be one of those, shot at random for being human, not for being John Lennon. Don't know why. Through hard work and determination, I made it through five days after his death without knowing the name of the man who killed him. He had nothing to do with John Lennon's real story.

We should all be able to finish our stories. The end of this century may break and bleed under the weight of its own unfinished stories. Millions and millions. What do you get if you mention in the same sentence John Lennon and the people who died in German and Russian concentration camps? Confused again and sadder than it's possible to be. Little smart aleck genius hit up the side of the head with a rifle butt for teasing the guard and died laughing in Auschwitz. No songs from him. His aunt missed him for a few days and then she died too.

Should we learn to build skyscrapers of sadness? To trail tears from here to the moon? How shall we feel this time we live in? Is our post-World War II mission to make the planet fit for killers like ourselves to live on? Poison water, air, and land and feel you've got the home that you deserve. Trees killed to build the plant that will build the bombs that will make the jobs that will buy the votes. Assassinations.

Resurrections. A certain kind of leader can help them happen. Not a glitter boy who distracts you from your grey life, but a leader who heats up your heart burning and hands it back to you. It's on you and in you.

Martin Luther King, Jr., might have something to do with getting you, your father and uncle lynched, your brother beat up bad just last week, to walk down to the courthouse, past the men with vicious eyes spitting tobacco juice at you, but he's not there. You and the other not-famous not-leaders with you have to lead yourselves into the room filled with ten sheriff's deputies thwacking their nightsticks on their palms looking at you, and you have to ask to register to vote. You have to lead yourself to stay as the registrar, also a deputy sheriff, fingers his gun and calls you every insulting name he knows about your race and gender. The civil rights movement, like every movement for real change in daily power, was all leaders .

We dream of new leaders who will entertain us, who will make us feel something is happening as we watch them on tv. Pray instead for a leader who will find the little flames flickering for justice and mercy deep in your heart, who will blow them into bonfire size and abandon you back to your daily life to find out what to do with it. Look in the mirror quietly. That leader might be you.

Try again. All those other tries were softening up, getting people used to the idea. Push now and the breakthrough is yours. Or, if not, you've done your bit for softening up.

Why do right-wing figures survive assassination attempts? I'm glad they do—somebody should. Why no Bobby Kennedy in a wheelchair or John Lennon making cracks from his hospital bed?

Coming home from church and watching Lee Oswald shot dead, live. A man with a Russian wife who's just killed a President is shot by a dude who looks like a Mafia hitman while cops in cowboy hats watch, and we're supposed to believe this is just a couple of lone nuts? The fifties drive for everything's fine fine was still strong in November of 1963.

If I knew exactly how Kennedy and Kennedy and King were killed, how would that change my behavior?

Assassination is politically motivated murder. The two clearest politically motivated murders I've lived through are almost never called assassinations. A politician, Dan White, shot two other politicians he disagreed with. The assassination of Harvey Milk. The assassination of George Moscone. People say a lot but they don't usually say that.

I watched Konrad Adenauer's funeral because he died old.

People say if ever there was a just war, World War II was it, but they forget to thank Hitler. It was a goodish war, as wars go, not because our guys were good but because Hitler was truly so abysmally bad that he justified our sleaziest moves and dumbest deaths. No credit to us at all.

Now there are guys who like to piss everyone off and get attention by saying there were no concentration camps, or they weren't really so bad. Because there are holes in the records. Don't y'all understand how odd it is for stuff like that to be recorded at all? It just happened, that time, that a lot of people involved were Germans and a lot of people involved were Jews and those are two cultures that are compulsive about writing things down. So there bizarrely are lots of records, though not perfect. Mostly when humans do stuff like that, and we do it all the time, there are no records at all. Cries in the night, bodies that rot, and that's it. There's the woman in Argentina with five vanished relatives—she will probably never know what happened to four of them. She got her daughter's hand in the mail.

I heard someone say at the peace conference, "Now it's like there are a thousand little Auschwitzes instead of one big one." Oh, yeah, we do stuff like that all the time. It's really important to know that we do. It's important to know because tribal warfare and random murder and mass assassination are spreading, country to country, around the planet. Watch yourself, revisionist historian, and do your bit to make peace between your local tribes, or you too may find yourself in an unprovable untraceable unmarked grave.

To prevent assassinations on the street, between groups who take their powerlessness out on each other, I think it's really important not to use murder words. For any group, there's a word you would use if you were murdering a member of that group because they're a member of that group. Don't use that word. It isn't funny and it isn't true.

I always seem to know a couple of straight men who, though politically correct and polite in every other way, can't say *gay*. Or *homosexual*. Everytime they mention gay men, they have to use an insult word. I want to get a button to put on for such men that says, "I believe that you're straight. Please say *gay*."

Gay men are lynched in this country. Groups of young men confused by their own deep affection for each other, trapped by a culture that says that the only true expressions of manhood are sex and violence but that 17-year-olds can't have either, sometimes beat up and sometimes kill random gay men. But they don't call them gay men. Watch your mouth. This is real life, and language can help make real death.

It is not possible for a white person to own enough out-of-print blues records to justify saying the death words for black people.

Yeah, sometimes they say the words themselves, but that's their gallows humor. If you're not on that gallows, it ain't your joke.

If gay men make you nervous, you might work on finding other models for affection and tenderness between males. The confused 17-year-olds could use them. To feel that someone is part of your soul and to have to express it by drinking and telling lousy jokes and talking about sports seems sad and lonely and unnecessary.

The coverage of John Kennedy's funeral might have made more sense if the newsmen had said that they'd fallen in love with him. They would briefly summarize the accomplishments of Kennedy's Senate career (none) and the accomplishments of his presidency (Bay of Pigs, Cuban missile crisis, and a dying civil rights bill) and quickly move to long rambling stories of his charm. Mourning the Kennedys as led by tv was much like a woman talking of the empty charmer who finally left her. "He took a lot and he didn't deliver on his promises but when he was around, life felt exciting." Electricity without an outlet. Your hair stands on end and nothing changes.

The instant deification of John Kennedy was particularly confusing to 13-year-old me who had never even gotten that he was a particularly good guy. I was raised in, was still in, a completely Republican environment, so people around me were expecting the worst when Kennedy got elected. I tried to watch for the worst, but it seemed to me that nothing much happened. I assumed I was missing something. Kennedy was fabulous at news conferences. Eisenhower didn't answer the question by rambling; Kennedy didn't answer the question by being witty—that was lots more fun. Probably my biggest hit on Kennedy, me with only two presidents in my repertoire, was that he was a lot younger than the other one. I assumed that the importance and interestingness of what presidents did would be revealed to me in the course of time.

In school, they told us he was shot right before school got out, even though they knew he was dead, let us out to find out he was dead for ourselves. Why, I wonder?

I walked home going "President Johnson. President Johnson. Sounds so weird, like the one who got impeached." I have since learned that almost any last name can come after President, and usually the last name I'd want least.

"Our late beloved leader stricken down." All those long funeral days the same tone, and every funeral the same tone. Men trained to read the winners from the county fair and "man shoots family of five and self" in the same matter-of-fact way were doing their lame impression of what it's like to be *really* serious. Tried to drape black on saying "The funeral cortege will leave the cathedral in a few minutes—no, we've just received word that the funeral cortege won't leave the cathedral for at least twenty minutes. There was no reason given for that delay." They were sad about everything. At John Kennedy's funeral I didn't know what I was sad about, if I was, and in the weekend before the funeral tried to figure out if a rock-ribbed Republican town would cancel school for the funeral of a Democrat and a Catholic. I had a big assignment due. School was cancelled, but not automatically, I bet.

The easiest emotion for me to get a hold of was the sense of being around for a unique unusual bad thing—an assassination, how bizarre, how rare. I didn't know this was just practice, that I'd get more assassinations, and with each one I'd know better and better why I was sad and how sad I was.

"The National Soul Searching about Vietnam scheduled for this time period will not be presented in order that we may bring you Watergate: Fascinating, Bloodless, and Not Your Fault." I wrote those words years ago. I think of them now as I refuse to participate in a Vietnam mourning ritual offered me by Asian American kids on the streets of San Francisco. "Wanna buy a bag of garlic. Only a dollar." No, I say, and they say, "Why not? Don't you got a dollar?" and all the killing in Indochina that brought them here is between us. I still don't buy the garlic.

I want three days of national mourning for some particular American man killed in Vietnam and the next week three days of mourning for some particular Vietnamese woman. Songs of their great potential and stories of their smiles, hyped-up celebrations of mildly generous things they did playing from every radio. The whole front section of the newspaper about how he died and the second section about how he did in high school and the reasons his family thought he mattered. A learned boring figure will explain to us the Vietnamese woman's religion and her neighbors who are still alive will recreate in pictures

her house, and tell us how she handled a rifle. Wounds will be described vividly, and perhaps our own wound will begin to open, bleed and heal.

Salutary pus was a term they used before antibiotics. If a deep wound started to heal from the bottom up, it would expel a lot of pus and get better fairly soon. If it closed up on the top fast, it kept the infection inside and might never heal. Throbbing for months, infection spreading, maybe killing you in the end.

The Vietnam Veterans' Parade with men who bravely fought and men who did brave things to not fight. The Vietnam Veterans' Parade with Americans who lost some time and friends and with Asians who lost everything and everyone. The Vietnam Veterans' Parade for everyone hurt by the war in Vietnam. If we could find each other and have the raw battlefield courage to look each other in the eye, to touch hands across the wounds and deaths we gave each other, if, if, if—I don't know. Maybe then there would be a little healing, or maybe it would just feel bitter good to be in the company of people who know the war in Vietnam isn't over. People who know you have to be cautious about starting a war because once a war is started it never ever stops.

However much you were hurt by the war in Vietnam you know that many people were hurt more. That is part of the pain.

I like the men in the early twenties, riding in their cars, getting their unemployment, starting their jobs, I love to see them on the street walking on two feet and ten toes, the countless American men who didn't die in Iran (a hard place that's having bad times and we helped make it hard and bad for years, but such incredible things we could have done to make it worse for us and them). Every war day, November and May, I thank whoever's listening that we skipped that one.

I believe that hunting brown people for sport is not the right way for this country to fulfill its destiny. What do you think? It seems to be an idea that comes up whenever we're nationally bored, so it must have some appeal. This great land of ours is founded and created on killing lots and lots of brown people for sport and profit. Does that statement remind you of Afro-Americans or Native Americans or both?

We have not yet found a way to run this country from one decade to the next without mass killing. Now our safety as a country, we insist, depends on our ability to kill everyone in the world. I think we're nuts and getting nutser. What do you think?

We had to kill Native Americans to make pure space for our white selves, we had to kill Africans to make our economy work (conservative estimates are that 15 million Africans died on their way to the Americas in kidnap ships), we had to kill a bunch of Japanese people so good us could run the Pacific instead of bad them. First we cut off their oil supply, then they surprisingly surprise attacked us. When some Japanese students visited a Native American reservation they were stunned at how completely Japanese the people there looked. In World War II, Americans were sometimes treated cruelly in camps run by people with dark hair and high cheekbones. Have you heard of karma?

Malcolm X's funeral, like the revolution, will never be televised.

The tragedy of the Kennedys, with ever more examples. I don't recall Martin Luther King, Jr., being presented as an example of the tragedy of the black man. The black man in America marked for death from the moment of manhood, the rifle pointed at him ready to shoot if he looked like standing up, like fighting back, if he looked like he was thinking of looking at a white woman. I don't recall a mention in his funeral days that King and the men and women in the civil rights movement had consciously chosen violent death every day instead of acquiescing to the quiet death that this country is based on.

The absent-minded coverage of Martin Luther King's funeral. They still talked real slow and serious. They gave it a lot of hours. They had to pay attention because the country felt like it was on the edge of the racial civil war King and his coworkers had prevented for years. They had to pay attention, but they didn't have to think.

I remember someone, Dan Rather I think, saying over and over that King's funeral march (people walking, not cars) was headed by people carrying three flags—"the American flag, the United Nations flag and we can't quite make out what the third flag is." Dan, one of the great men of the century has died and if you can't figure out what flag is leading his death march, you can damn well find someone who knows.

It was the Christian flag, the Protestant flag, actually, that is inaccurately called the Christian flag. White field, blue rectangle in the corner with a red cross in it. It's in the front of most sanctuaries of Protestant churches in this country, along with the American flag. What did Dan think it was—some quaint black custom?

Protestant Christianity is a quaint black custom and the very heart and soul and guts of where Martin Luther King lived. That's a hard one for people floating through the general culture with the vaguest spiritual beliefs and the most specific career ambitions to understand. The people who make big, world-changing differences don't have vague beliefs. They believe in the old religion in a new way. They hear voices and the voices have names. The Father, the Son and the Holy Spirit were not mentioned in mourning commentary on King, even as Joe Kennedy's ill-gotten money wasn't mentioned in reviews of the Kennedys' careers, but that's where the power came from,

confusing though it is for those of us without either inherited wealth or religious certainty. We will have to solve the mystery of how to lead ourselves some other way.

A truly good incidental thing the Kennedy funerals did was have tv show the country a Catholic service with a lovable priest to explain it. I grew up among people who virulently hated Catholics without having any idea of what Catholics did. Maybe vague images of eating incense for breakfast and mindlessly following secret orders from the Pope. It was great for people like that who would never enter a Catholic church to see a complete Catholic service and learn that it was like their own church services—it made its own kind of sense and had its own kind of beauty and was often boring and went on too long.

King's funeral offered the same kind of opportunity. What do black people do? Where did King's courage come from? What was the culture of the Southern black church that gave birth to the civil rights movement? As the country was overwhelmed by grief and fear of racial war, and glued to the tv, it would have been interesting to find out some of that. No chance. Priests explained the Kennedy funerals, but no black ministers explained King's.

The message was blacks have no culture, Protestants have no culture—they just do stuff. If the white journalists assigned to the event didn't understand some of what happened, they said, "Beats me" and moved on with no embarrassment at all.

Journalists didn't believe that Protestants existed in this country until they got Jerry Falwell, who operates on a level they can understand. Journalists can seriously say the Moral Majority and all that are the first serious incursion of religion into American politics when the civil rights movement changed this country top to bottom and was Baptist to its bones.

King was a great man. He wasn't just another charmer. It wasn't just another funeral. It was a marker for the passing of one of the people who won't die. If he speaks to you at all, he's always speaking to you. He doesn't let you off the hook just because he's dead. Someone like me who didn't know him is barely allowed to mourn, but only to try to reply. His life is a question still asking.

While he lived, he kept us out of Jonestown. How many deaths did Jim Jones cause? How many deaths did the Kennedy brothers cause? How many deaths did Martin Luther King, Jr., cause? How many deaths did each of these men prevent?

An example of the crazed irrationality of Lon Nol in Cambodia was the vendetta against people with glasses who became symbols of Western education and corruption. If you had been on Harvard Henry Kissinger's hit list, how would you feel about people with glasses? About Western education? Who killed Cambodia?

If Jim Jones had ordered the killing of several people, including a Congressman, but *not* then asked his followers to kill themselves, how many of his followers would be alive today? How many would have been killed by agents of the United States government? After a jungle outpost that included hundreds of black people had killed a Congressman, what would have happened then? Peaceful negotiations? Or the Marines getting to practice jungle warfare and baby killing? Jones saved us that scenario. Real white of him.

If you had a choice between humiliating yourself daily for the rest of your life to get barely enough food to eat and taking a chance on making a new life in the wilderness, what would you do? A lot of those jungle suicides used to be somebody's maid. Had to have their souls in secret, "Yes, Mrs. Jones," smiling still while doing somebody else's manual labor, after four centuries.

OK, there should be more choices than that, but are there? Martin Luther King, Jr., isn't here to dream them real for us. Am I dreaming them? Are you?

I'd like to mourn my sisters too. They don't die as loudly as the allegedly great men, but they die brave and they die of dreaming. (I wish us a blessing and to find our own kind of greatness.) I wish us first to give ourselves protection. Don't give crazy white men the gift of Jonestown. Don't kill yourself to keep them from having to kill you. Don't starve yourself little. Don't make your head dumb. Don't kill yourself in slow motion, woman, using drugs you don't enjoy all morning or all night. Don't draw the curtains on the sky and watch the morning lies of women who find smiles in choosing soap.

I pray for and work for and dream of and believe in a world where there are no assassinations. But I tell you the truth in the now is, sisters, that they don't assassinate us because they don't need to. The reasons you've told yourself for not trying, the feelings that keep you from moving where you want to go, the habits of nice nice and not in the way—why waste bullets? The ruler says to the trusted aide—"Get rid of the enemy and don't tell me how." We're both the aide and the enemy. We get rid of ourselves, our deepest strongest selves, and even we don't know how. So gracefully done and so devastating.

We owe it to ourselves and to the planet, to each other and to the millions of men who aren't crazy and who want and need our individual and particular wisdom to start acting. We owe our lives to life itself.

Ethel and Jacqueline Kennedy looked like the only Americans not present for the famous funerals—drugged out, on best male advice. You don't need to be here for this, dear. Have you got a permission slip to attend your own life?

The lady in the cottage down the street in Rising Sun. I visited her sometimes. She was about 79, her face a wreath of wrinkles of kindness and hard work, one of those people you can just sit with and get peace.

She had been living on a farm outside of town, the farm she'd lived on sixty years, with her husband, and then after her husband died and the kids left. Her son had worried about her getting hurt in one of the outbuildings or something and had moved her into town. She'd lived in the country all her life. Now she lived on a state route that had steady traffic 23 hours a day. She missed her garden. She'd say the word garden and I'd smell it, tomato vines and fresh dug earth, and feel the sun and slow, steady work of a quiet summer day. I bet she had zinnias.

She got a little sickly in town. She got a little too sickly and her son moved her to a rest home and two months later she died.

I think she deserted some tomatoes and some sweet corn. I think she was supposed to have a few more gardens. I think some sunrises were lonely without her. There were lots of places to live in that town on quiet streets with gardens. Would that have made a difference? I mourn her with every garden I smell and praise her peace.

Projection, so imaginary and so real. Some, most, all of what I think of you and do to you I'm thinking of myself and trying to do to myself. I was wondering why some men need to insult and scare the woman in themselves when they meet her on the street and why sometimes some men need to violate and beat and kill the woman in themselves. The question has nothing to do with justice and something to do with healing.

I walked about two blocks in the inappropriate direction without remembering to double layer my brick face and up the power on my body bubble and the old drunk said, "Hey, baby, you ever fucked with a white man?" and I wanted to break both his legs. I did not want to hear so much that is sick unto death in my society rolled into one phrase directed at me and I didn't want him to get away with it. I wanted a bunch of aliens about half again as physically strong as men to land on Earth and I wanted them to wander around the Earth sometimes ignoring humans and sometimes saying nice things to them and sometimes if humans responded to the nice things they'd have a nice conversation and sometimes if the humans responded nicely they would shortly find themselves being terrorized in the most basic way and wounded as deeply as possible as the alien screamed, "You want it. You love it. You smiled at me." Then sometimes the aliens would say hostile threatening things to humans on the street and men would get to decide what is the appropriate response to a hostile remark from a being half again as strong as you are who is a member of a group that has a history of torturing and killing members of your group. Men would get to start working on that koan, for women it would be nothing new. None of this would be new to women.

OK, that's just my fantasy but I am tired of being assassination bait on the street, just walking representing some power redistribution terrible to men who have lost so much power already. I'm tired of it for myself and much tireder of it for women less tall than I, women older, women less skilled at draining every trace of human softness from their being as they travel through the shared spaces of our planet. Barely shared. Shared at twice the risk if you're a woman. Let me put it this way: One out of every four women you know will be tortured intensely before she dies. It's a kind of torture that can be so weakening and disheartening and wounding for life that it renders more direct assassination superfluous.

Incidentally, at the end of the news story, a woman was killed in Elizabeth, New Jersey, by the train that was carrying the body of Senator Robert Kennedy to lie in state in the nation's Capitol. Incidentally, a woman died. By the way, women live. Was there any woman in the United States of America in 1968 whose death by any means could have gotten three days of tv coverage? Is there any woman today who would get that kind of respect, alive or dead?

Why haven't there been any great women whatevers? Because you lie and the idea of greatness is itself a lie as long as it systematically excludes what women do. "Observe the bold, strong sculpture against the sky, clean, upright, brave, technically exquisite in its uncompromising strength and rather phallic in its connotations of great power." "O, yuk, that's just a vagina symbol. How gross. How narcissistic. Forget it. I, the great avant garde art critic, will certainly forget it as soon as possible because vaginas terrify me. Some women at the exhibit seemed strangely interested, but they would."

Hidden in lushness, folding within folds unfolding, slick as a melon and deeper than you are long, the wonderfulness of women is only beginning to be tenderly explored. When the softest truest parts of women have been gently touched in story, song, and acting as often as they have been harshly raped ("That was exciting.") we will be at the beginning of the beginning.

I guess the art critics don't understand that every time I see or read a rape scene (since I work to avoid them, it doesn't happen more than 10 or 20 times a year), my vagina contracts in fear and pain and my heart dies a little more. So if I see a work of art that is, among other things, like a vagina, it's so nice and friendly for me and my body. Here's a vagina being beautiful, like mine, and just being, existing, like it's OK for a vagina to *be*, and not just a matter of time till some cosmic scriptwriter

decides it's got to be beat up.

I think there have been enough rape scenes. I think women should refuse to act them out for men to watch for at least a couple thousand years.

I think women enjoy knowing stuff too much. Maybe all oppressed people get too much pleasure out of knowing stuff because it's the easy thing to do. You know the guys you work with couldn't do it without you. You know you save their asses in more ways than they're smart enough to notice and you know they get too much money and you don't get enough. You know the work you do doesn't really need to be done anyway. Somehow knowing that makes it all OK. Smugness in lieu of salary. Inner condescension in lieu of meaning. Find peace through snubbing your own life.

Women and children have been misleading men for some time. In a short confrontation of physical strength with a woman or a child, a man will win. This has led some men to construct the entire world as a series of short confrontations of physical strength that they win. Most inventions are to help win these short fights. There goes a mountain, asphalt kills a field, the Amazon becomes a desert—it's as easy as beating up a child. But short is too short and long means you're killing yourselves, guys. While women watch silently and know we're being killed too. But it's OK, because we know it? Assassinations are amputations on the body we all share.

When it all gets too confusing, when it's a mess and you can't tell whose fault it is and it might be yours, try to change the whole mess into a fight you can win. Kill someone who can't fight back.

Were the Rosenbergs executed or assassinated? Were they Jewish? Did that matter? Whose crime was the U.S. government killing them for?

The United States government had a lot of chances to save some of the 6 million Jews and 6 million gays, gypsies, political activists, and others who were killed in German death camps. The United States government didn't do shit to save those people unless they were proven geniuses with friends in this country. We hardly let any of them in before the war, refused to participate in salvage deals during the war and wouldn't bomb the railroad tracks in Auschwitz. Wouldn't even bomb the railroad lines to Auschwitz—that one always got me. Allied bombers passing right over, Allied leaders knowing what was happening there, but no bombs for the mass-death input valve.

You remember that death camps are one of the things that made World War II a good war, as wars go, but during the fighting of that war the good guys wouldn't cross the street to spit on the death camps. It wasn't what they cared about. While many people at the top knew about the camps in detail and did nothing, innocent GIs stumbled into them on their way to liberate something else and sometimes killed the freed prisoners by feeding them too much food. For some reason, the tender loving debriefing of the astronauts home from space always reminded me of people dying of four bites of good food outside Dachau. How do you like the century so far?

So all these people, millions Jewish, died while the U.S., waging the just war, did nothing. Then the war was over and with pictures and stories, it was out; it was horrible beyond comprehension.

Then 3 Jews got trashed, well-publicized, by the U.S. government. Robert Oppenheimer got his life ruined. The Rosenbergs lost theirs. Was this to reassure ourselves that Jews really were bad so we'd feel better about our anti-Semitism that let us sleep through the killing of one-third of all the Jews in the world?

I don't know. But I think those kinds of questions are more important to face than yet another reshuffle of the alleged evidence. People weren't foaming at the mouth and bleeding from the heart during that trial because of the evidence. Other things were happening. We would be blessed to find out what they are so they don't have to happen again.

I'm not a fan of the perfectly timed radical crime. When the government combines the fairly obscure serious crime with the fairly obscure serious radical at the very moment when radicals need to be discredited, it seems silly, in a despairing way, to even waste time studying the evidence. Half the radicals in the world became experts on the detail and nuance of a robbery/murder in South Braintree, Massachusetts, because the U.S. government assigned it to Sacco and Vanzetti. I always wondered how the guys who really did it felt the day Sacco and Vanzetti died. The crime had nothing to do with them or with what radicals wanted, but for a couple of years the passion of world justice and big change poured through that sordid event. The government chooses our battlefield again. I don't know what the other choices are, once the screw is on. When Joe Hill was accused of another robbery/murder he essentially said "Write me off" and as he died he said, "Don't mourn, organize." But who can be so single-minded or would want to be?

Remember Salsedo? Andrea Salsedo, not a memorable man. When Sacco and Vanzetti were arrested for murdering a payroll guard and stealing $15,000, what they were actually doing at the moment of their arrest was distributing literature about a rally for good old dead Andrea Salsedo, a typesetter in the land of free speech. Salsedo had been detained at the Department of Justice Building in New York on suspicion of having typeset an anarchist paper called "Plain Words." On the morning of May 2, 1920, his body was found smashed on the ground 14 floors below the room he'd been held in. A suicide, the

government said in its usual way. A murder, said radicals, but found themselves in their usual position of being unable to either get or manufacture evidence. Some mild protests were forming, such as the one Sacco and Vanzetti were leafletting for, then the government said, "Let's not talk about dead men outside the Justice Building. Let's talk about a payroll robbery." And radicals dutifully did. For years. We always have the power of action, but the lights and camera go where the government points. Farewell, Andrea Salsedo.

Did anyone ever notice that having an intelligence service doesn't get anywhere? I mean that's the real point of the Le Carré Smiley books and their real life equivalents for a taxpayer. The sneaky vicious bastards on both sides just come out even. You put all your secrets in one place so people who are into secrets know where to go and get them—and they do. Even if you think spy vs. spy is an OK game, there's no reason for working people to pay for it. It's like if a bunch of little old ladies happened to want to divide into two crocheting teams, and frantically crochet and try to steal and unravel each other's crocheting, that would be OK, but why would we pay millions for their madness? Of course, spies are nowhere near that innocuous. Since they do in fact know that they can't get any useful information ahead of the other team, they feel they have to do stuff, and the stuff they do poisons the ways of the world.

The only secret that matters is constantly available to all of us. The secret is it's possible. That was the secret of the atomic bomb and that's the secret of anything. In 1938, an article appeared in a scientific journal that made it clear to those who knew about physics that it was theoretically possible to split atoms and release much energy. It was clear that that would be a hell of a weapon. So different things happened like Albert Einstein and others writing Roosevelt and telling him if we didn't do it Hitler would and it would be awful and etc. and so forth. So went forth much money and much brilliance to find out that what was theoretically possible was actually possible.

On August 6, 1945, the United States government revealed to the world the secret of the atomic bomb—the secret that it could be done. Because given common knowledge about physics and given the knowledge that it could be done, it was just a matter of time and money for someone else to do it.

Have you tried to do something that you thought couldn't be done? Something that isn't done in your circle, or you'd never heard of, or you thought was against the rules. Good or bad, you have to push through a lot of resistance to do something for the first time. The world or our heads slow us down a lot. But after you know that it can be done, it's amazingly easier.

The revolution is available to all of us. That unheard of way you dream of people acting that seems impossible—if you push through the no's that surround it and do it, the secret's out—it's possible, for you and the witnesses.

How could I not love the Russians, so big, so oafish, so scared because they don't know what to do? It's like looking in the mirror.

Scared of the vastness of the land and the fires in our hearts, ashamed before the memories of ancestors brave enough to make revolutions. Can we mourn also the sad craziness of their shooting down an airliner and hope they will mourn the craziness of our pointing at them missiles as close as Cuba? Will the human world be forfeit to the fact that we both feel like our clothes don't fit, that we're always so afraid of doing the wrong thing that we can rejoice when that other big weirdo does something wronger?

You know if it's not going to be a really large tragedy, it's going to have to be one of those corny comedies where the lovers spend the first act being spiteful and dumb at each other to cover up the depth of the passionate attachment. Act III, if we make it so far, will be hokey, full of mad embraces and mingled Bud and vodka. Sounds impossible, and will be, until it happens.

We could perhaps start by exchanging recipes? Eastern European cooking and Asian cooking are big in this country; we could probably get some good stuff from that Eastern European/Asian country we think about so much.

The murder of the majority of the humans and animals on Earth for political reasons? Human history over and assassination wins?

No.

Every assassination and attempted assassination I say "*No*!" Used to say, "*No*, that can't happen!" I've learned to say, "*No*, not again!" So the opposite of an assassination for me is one of those events you hear about that makes you immediately go "*Yes*!" Yes, that was the right and funny thing to do. Yes, the world should be like that. Yes, such grace in action lifts my heart. Courage is its own communication medium—it leaps from heart to heart.

A little knowledge of what such actions are, a little courage to do them, makes our elaborate cynicism about "how the world really is" dated; they free us from the prison of what we know to the reality of what we dream.

Assassins keep diaries of unlikely things they want to do. Do you? Or do you let someone else dream your future?

The Earth our mother always says yes. From the skins of the mountains to the depths of the sea, across all her vast surfaces, she blooms with as much life as can possibly be. Yesses everywhere swimming and floating and running, dancing a trillion dances for the sun. Can we learn to bring as much life as we can to every place that we are, as she does? Can we learn to nurture what we love and not kill what we fear? What is the answer? Yes. ■

27 GATE FIVE ROAD SAUSALITO CA 94965

U.S. anti-Japanese (WWII)

US AND THEM

by Fran Peavey

with Myrna Levy and Charles Varon

Cuban anti-U.S. (1970)

TIME WAS WHEN I KNEW that the racists were the lunch-counter owners who refused to serve blacks, the warmongers were the generals who planned wars and ordered the killing of innocent people, and the polluters were the industrialists whose factories fouled the air, water and land. I could be a good guy by boycotting, marching, and sitting in to protest the actions of the bad guys.

But no matter how much I protest, an honest look at myself and my relationship with the rest of the world reveals ways that I too am part of the problem. I notice that on initial contact I am more suspicious of Mexicans than of whites. I see that I'm addicted to a standard of living maintained at the expense of poorer people around the world — a situation that can only be perpetuated through military force. And the problem of pollution seems to include my consumption of resources and creation of waste. The line that separates me from the bad guys is blurred.

When I was working to stop the Vietnam War, I'd feel uneasy seeing people in military uniform. I remember thinking, "How could that guy be so dumb as to have gotten into that uniform? How could he be so acquiescent, so credulous as to have fallen for the government's story on Vietnam?" I'd get furious inside when I imagined the horrible things he'd probably done in the war.

Several years after the end of the war, a small group of Vietnam veterans wanted to hold a retreat at our farm in Watsonville. I consented, although I felt ambivalent about hosting them. That weekend, I listened to a dozen men and women who had served in Vietnam. Having returned home only to face ostracism for their involvement in the war, they were struggling to come to terms with their experiences.

They spoke of some of the awful things they'd done and seen, as well as some things they were proud of. They told why they had enlisted in the army or cooperated with the draft: their love of the United States, their eagerness to serve, their wish to be brave and heroic. They felt their noble motives had been betrayed, leaving them with little confidence in their own judgment. Some questioned their own manhood or womanhood and even their basic humanity. They wondered whether they had been a positive force or a negative one overall, and what their buddies' sacrifices meant. Their anguish disarmed me, and I could no longer view them simply as perpetrators of evil.

How had I come to view military people as my enemies? Did vilifying soldiers serve to get me off the hook and allow me to divorce myself from responsibility for what my country was doing in Vietnam? Did my own anger and righteousness keep me from seeing the situation in its full complexity? How had this limited view affected my work against the war?

When my youngest sister and her husband, a young career military man, visited me several years ago, I was again challenged to see the human being within the soldier. I learned that as a farm boy in Utah, he'd been recruited to be a sniper.

One night toward the end of their visit, we got to talking about his work. Though he had also been trained as a medical corpsman, he could still be called on at any time to work as a sniper. He couldn't tell me much about this part of his career — he'd been sworn to secrecy. I'm not sure he would have wanted to tell me even if he could. But he did say that a sniper's work involved going abroad, "bumping off" a leader, and disappearing into a crowd.

When you're given an order, he said, you're not supposed to think about it. You feel alone and helpless. Rather than take on the Army and maybe the whole country himself, he chose not to consider the possibility that certain orders shouldn't be carried out.

I could see that feeling isolated can make it seem impossible to follow one's own moral standards and disobey an order. I leaned toward him and said, "If you're ever ordered to do

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Is it possible to work for social change without casting one's opponents in the role of Enemy? In this chapter from her new book, Heart Politics, *teacher/activist/comedian Fran Peavey tackles that question with examples from people's lives. Fran's background ranges from taxi driving and furniture design to political activism and doctoral work in innovation theory and technological forecasting. She and Charles Varon are currently performing "nuclear comedy" as Fran and Charlie, the Atomic Comics.*

Heart Politics *is available in paperback from New Society Publishers, 4722 Baltimore Avenue, Philadelphia, PA 19143 for $9.95, plus $1.50 postage.* —*Jay Kinney*

something that you know you shouldn't do, call me immediately and I'll find a way to help. I know a lot of people would support your stand. You're not alone." He and my sister looked at each other and their eyes filled with tears.

HOW DO WE LEARN whom to hate and fear? During my short lifetime, the national enemies of the United States have changed several times. Our World War II foes, the Japanese and the Germans, have become our allies. The Russians have been in vogue as our enemy for some time, although during a few periods relations improved somewhat. The North Vietnamese, Cubans, and Chinese have done stints as our enemy. So many countries seem capable of incurring our national wrath — how do we choose among them?

As individuals, do we choose our enemies based on cues from national leaders? From our schoolteachers and religious leaders? From newspapers and TV? Do we hate and fear our parents' enemies as part of our family identity? Or those of our culture, subculture, or peer group?

Whose economic and political interests does our enemy mentality serve?

AT A CONFERENCE on holocaust and genocide I met someone who showed me that it is not necessary to hate our opponents, even under the most extreme circumstances. While sitting in the hotel lobby after a session on the German holocaust, I struck up a conversation with a woman named Helen Waterford. When I learned she was a Jewish survivor of Auschwitz, I told her how angry I was at the Nazis. (I guess I was trying to prove to her that I was one of the good guys.)

"You know," she said, "I don't hate the Nazis." This took me aback. How could anyone who had lived through a concentration camp not hate the Nazis?

Then I learned that Helen does public speaking engagements with a former leader of the Hitler Youth movement: they talk about how terrible fascism is as viewed from both sides. Fascinated, I arranged to spend more time with Helen and learn as much as I could from her.

In 1980, Helen read an intriguing newspaper article in which a man named Alfons Heck described his experiences growing up in Nazi Germany. When he was a young boy in Catholic school, the priest would come in every morning and say, "Heil Hitler," and then "Good Morning," and finally, "In the name of the Father and the Son and the Holy Spirit . . ." In Heck's mind, Hitler came before God. At ten, he volunteered for the Hitler Youth, and he loved it. It was in 1944, when he was sixteen, that Heck first learned that the Nazis were systematically killing the Jews. He thought, "This can't be true." But gradually he came to believe that he had served a mass murderer.

Heck's frankness impressed Helen, and she thought, "I want to meet that man." She found him soft-spoken, intelligent and pleasant. Helen had already been speaking publicly about her own experiences of the holocaust, and she asked Heck to share a podium with her at an upcoming engagement with a group of 400 schoolteachers. They spoke in chronological format, taking turns telling their own stories of the Nazi period. Helen told of leaving Frankfurt in 1934 at age twenty-five.

She and her husband, an accountant who had lost his job when the Nazis came to power, escaped to Holland. There they worked with the underground Resistance, and Helen gave birth to a daughter. In 1940 the Nazis invaded Holland. Helen and her husband went into hiding in 1942. Two years later, they were discovered and sent to Auschwitz. Their daughter was hidden by friends in the Resistance. Helen's husband died in the concentration camp.

Heck and Waterford's first joint presentation went well, and they decided to continue working as a team. Once, at an assembly of 800 high school students, Heck was asked, "If you had been ordered to shoot some Jews, maybe Mrs. Waterford, would you have shot them?" The audience gasped. Heck swallowed and said, "Yes. I obeyed orders. I would have." Afterward he apologized to Helen, saying he hadn't wanted to upset her. She told him, "I'm glad you answered the way you did. Otherwise, I would never again believe a word you said."

Heck is often faced with the "once a Nazi, always a Nazi" attitude. "You may give a good speech," people will say, "but I don't believe any of it. Once you have believed something, you don't throw it away." Again and again, he patiently explains that it took years before he could accept the fact that he'd been brought up believing falsehoods. Heck is also harassed by neo-Nazis, who call him in the middle of the night and threaten: "We haven't gotten you yet, but we'll kill you, you traitor."

How did Helen feel about the Nazis in Auschwitz? "I disliked them. I cannot say that I wished I could kick them to death — I never did. I guess that I am just not a vengeful person." She is often denounced by Jews for having no hate, for not wanting revenge. "It is impossible that you don't hate," people tell her.

At the conference on the holocaust and genocide and in subsequent conversations with Helen, I have tried to understand what has enabled her to remain so objective and to avoid blaming individual Germans for the holocaust, for her suffering and for her husband's death. I have found a clue in her passionate study of history.

For many people, the only explanation of the holocaust is that it was the creation of a madman. But Helen believes that such an analysis only serves to shield people from believing that a holocaust could happen to them. An appraisal of Hitler's mental health, she says, is less important than

U.S. anti-German (WWII)

Italian anti-U.S. (WWII)

an examination of the historical forces at play and the ways Hitler was able to manipulate them.

"As soon as the war was over," Helen told me, "I began to read about what had happened since 1933, when my world closed. I read and read. How did the 'S.S. State' develop? What was the role of Britain, Hungary, Yugoslavia, the United States, France? How can it be possible that the holocaust really happened? What is the first step, the second step? What are people searching for when they join fanatical movements? I guess I will be asking these questions until my last days."

German anti-French (WWI)

THOSE OF US WORKING for social change tend to view our adversaries as enemies, to consider them unreliable, suspect, and generally of lower moral character. Saul Alinsky, a brilliant community organizer, explained the rationale for polarization this way:

> One acts decisively only in the conviction that all the angels are on one side and all the devils are on the other. A leader may struggle toward a decision and weigh the merits and demerits of a situation which is 52 percent positive and 48 percent negative, but once the decision is reached he must assume that his cause is 100 percent positive and the opposition 100 percent negative. . . . Many liberals, during our attack on the then-school superintendent [in Chicago], were pointing out that after all he wasn't a 100-percent devil, he was a regular churchgoer, he was a good family man, and he was generous in his contributions to charity. Can you imagine in the arena of conflict charging that so-and-so is a racist bastard and then diluting the impact of the attack with qualifying remarks? This becomes political idiocy.

BUT DEMONIZING one's adversaries has great costs. It is a strategy that tacitly accepts and helps perpetuate our dangerous enemy mentality.

Instead of focusing on the 52-percent "devil" in my adversary, I choose to look at the other 48 percent, to start from the premise that within each adversary I have an ally. That ally may be silent, faltering, or hidden from my view. It may be only the person's sense of ambivalence about morally questionable parts of his or her job. Such doubts rarely have a chance to flower because of the overwhelming power of the social context to which the person is accountable. *My* ability to be *their* ally also suffers from such pressures. In 1970, while the Vietnam War was still going on, a group of us spent the summer in Long Beach, California, organizing against a napalm factory there. It was a small factory that mixed the chemicals and put the napalm in canisters. An accidental explosion a few months before had spewed hunks of napalm gel onto nearby homes and lawns. The incident had, in a real sense, brought the war home. It spurred local residents who opposed the war to recognize their community's connection with one of its most despicable elements. At their request, we worked with and strengthened their local group. Together we presented a slide show and tour of the local military-industrial complex for community leaders, and we picketed the napalm factory. We also met with the president of the conglomerate that owned the factory.

We spent three weeks preparing for this meeting, studying the company's holdings and financial picture and investigating whether there were any lawsuits filed against the president or his corporation. And we found out as much as we could about his personal life: his family, his church, his country club, his hobbies. We studied his photograph, thinking of the people who loved him and the people he loved, trying to get a sense of his worldview and the context to which he was accountable.

We also talked a lot about how angry we were at him for the part he played in killing and maiming children in Vietnam. But though our anger fueled our determination, we decided that venting it at him would make him defensive and reduce our effectiveness.

When three of us met with him, he was not a stranger to us. Without blaming him personally or attacking his corporation, we asked him to close the plant, not to bid for the contract when it came up for renewal that year, and to think about the consequences of his company's operations. We told him we knew where his corporation was vulnerable (it owned a chain of motels that could be boycotted), and said we intended to continue working strategically to force his company out of the business of burning people. We also discussed the company's other war-related contracts, because changing just a small part of his corporation's function was not enough; we wanted to raise the issue of economic dependence on munitions and war.

Above all, we wanted him to see us as real people, not so different from himself. If we had seemed like flaming radicals, he would have been likely to dismiss our concerns. We assumed he was already carrying doubts inside himself, and we saw our role as giving voice to those doubts. Our goal was to introduce ourselves and our perspective into his context, so he would remember us and consider our position when making decisions.

When the contract came up for renewal two months later, his company did not bid for it.

WORKING FOR social change without relying on the concept of enemies raises some practical difficulties. For example, what do we do with all the anger that we're accustomed to unleashing against an enemy? Is it possible to hate actions and policies without hating the people who are implementing them? Does empathizing with those whose actions we oppose create a dissonance that undermines our determination?

I don't delude myself into believing that everything will work out for the best if we make friends with our adversaries. I recognize that certain military strategists are making decisions that raise the risks for us all. I know that some police officers will rough up demonstrators when arresting them. Treating our adversaries as potential allies need not entail unthinking acceptance of their actions. Our challenge is to call forth the humanity within each adversary, while preparing for the full range of possible responses. Our challenge is to find a path between cynicism and naivete. ■

How Can I Help?

SALLIE TISDALE: Charity — selfless giving — is a fundamental part of almost all religions. Ram Dass and Paul Gorman approach charitable service as a liberation from the prison of self and separateness, and as a solution to the inarticulate loneliness we feel when we lack a connection to others. They have collected testimonies of many people for this book — from volunteers in missions in developing countries to a clown in a children's cancer ward — and with these stories show the similarity of our motive to help each other, and the satisfaction it brings.

The anecdotes are the best part here, and the reader wants more of them. Between peoples' stories, the authors narrate simple psychology directed to the helping professions. They strongly encourage the practice of meditation as a method for opening the mind and heart, avoiding burnout and despair. Although the "meat" of the book is too simple, ***How Can I Help?*** *is a timely and optimistic book, unafraid of spiritual questions.*

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A turning point in my life came one day on a train in the suburbs of Tokyo. At one sleepy little station, the doors opened and the drowsy afternoon was shattered by a man yelling at the top of his lungs. He was a big man, a drunk and exceedingly dirty Japanese laborer. The laborer aimed a kick at the retreating back of an aged grandmother. "YOU OLD WHORE," he bellowed, "I'LL KICK YOUR ASS!" He missed, and the old lady scuttled safely beyond his reach. The train rattled on, the passengers frozen with fear. I stood up.

I was still young back then, and in pretty good shape. I had been putting in a solid eight hours of Aikido training every day for the past three years. I was totally absorbed in Aikido. I couldn't practice enough. Trouble was, my skill was yet untried in actual combat. We were strictly enjoined from using Aikido techniques in public unless absolute necessity demanded the protection of other people. My teacher, the founder of Aikido, taught us every morning that Aikido was nonviolent. "Aikido," he would say over and over, "is the art of reconciliation. To use it to enhance one's ego, to dominate other people, is to betray totally the purpose for which it is practiced. Our mission is to resolve conflict, not to generate it." I listened to his words, of course, and even went so far as to cross the street a few times to avoid groups of lounging street punks who might have provided a jolly brawl in which I might test my proficiency. In my daydreams, however, I longed for a legitimate situation where I could defend the innocent by wasting the guilty.

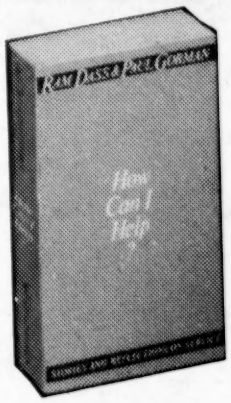
Such a scene had now arisen. I was overjoyed. "My prayers have been answered," I thought to myself as I got to my feet. "This . . . this . . . *slob* is drunk and mean and violent. He's a threat to the public order, and he'll hurt somebody if I don't take him out. The need is real. My ethical light is green."

Seeing me stand up, the drunk shot me a look of bleary inspection. "AHA!" he roared, "A HAIRY FOREIGN TWERP NEEDS A LESSON IN JAPANESE MANNERS!" He gathered himself for his big rush at me.

A split second before he moved, somebody else shouted "HEY!" It was loud, ear-splitting almost, but I remember it had a strangely joyous, lilting quality to it — as though you and a friend had been searching diligently for something, and he had suddenly stumbled upon it.

We both stared down at this little old man. He must have been well into his seventies, this tiny gentleman, immaculate in his kimono and hakama. He took no notice of me but beamed delightedly at the laborer, as though he had a most important, most welcome secret to share.

"C'mere," the old man said in an easy vernacular, beckoning to the drunk, "c'mere and talk with me." He



How Can I Help?
Ram Dass and Paul Gorman
1985; 244 pp.
$5.95
($6.95 postpaid) from:
Random House
Attn: Order Department
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access

waved his hand lightly, and the big man followed as if on a string. The drunk was confused but still belligerent. He planted his feet in front of the little old man and towered threateningly over him. "WHAT THE FUCK DO YOU WANT, YOU OLD FART?" he roared above the clacking wheels.

The old man continued to beam at the laborer. There was not a trace of fear or resentment about him. "What you been drinkin'?" he asked lightly, his eyes sparkling with interest.

"I BEEN DRINKIN' SAKE, GOD DAMN YOUR SCUMMY OLD EYES!" the laborer declared loudly. "AND WHAT BUSINESS IS IT OF YOURS?"

"Oh, that's wonderful," the old man said with delight, "absolutely wonderful! You see, I just love sake. Every night me and my wife (she's seventy-six, you know), we warm up a little bottle of sake and we take it out into the garden and we sit on the old bench that my grandfather's student made for him. We watch the evening fade, and we look to see how our persimmon tree is doing. My great-grandfather planted that tree, you know, and we worry about whether it will recover from those ice storms we had last winter. But anyway, we take our little jug of sake and go out and enjoy the evening by our tree. Even when it rains!" He beamed up at the laborer, his eyes twinkling, happy to share the wonderful information.

As he struggled to follow the intricacies of the old man's conversation, the drunk's face began to soften. His fists slowly unclenched. "Yeah," he said when the old man finished. "I love sake too . . . " His voice trailed off.

"Yes," said the old man, smiling, "and I'm sure you have a wonderful wife."

"No," replied the laborer, shaking his head sadly, "I don't got no wife." He hung his head and swayed silently with the motion of the train. And then, with surprising gentleness, the big man began to sob. "I don't got no wife," he moaned rhythmically, "I don't got no home, I don't got no clothes, I don't got no tools, I don't got no money, and now I don't got no place to sleep. I'm so ashamed of myself." Tears rolled down the big man's cheeks; a spasm of pure despair rippled through his body.

"My, my," the old man clucked sympathetically, although his general delight appeared undiminished, "that is a difficult predicament indeed. Why don't you sit down here and tell me about it?"

Just then the train arrived at my stop. Maneuvering my way out, I turned my head for one last look. The laborer was sprawled like a sack on the seat, his head in the old man's lap. The old gentleman was looking down at him kindly, a beatific mixture of delight and compassion beaming from his eyes, one hand softly stroking the filthy, matted head.

As the train pulled away from the station, I sat on a bench and tried to relive the experience. I saw that what I had been prepared to accomplish with bone and muscle had been accomplished with a smile and a few kind words. I recognized that I had seen Aikido used in action, and that the essence of it was reconciliation and love.

—Terry Dobson

POGO MEETINGS

Where adversaries meet as friends

by Jim Sullivan

"We have met the enemy . . . and he is us." —*Pogo*

POGO IS THE NAME WE HAVE BESTOWED upon a rare and perhaps even endangered species of social gathering. Eight members at a time, of which I am one, have been meeting once or twice a month for two-and-a-half years.

The group is unique because it is composed of four active "environmentalists" and four prominent "developers." We meet to discuss our political and philosophical differences.

Our earliest goal was to cut through some of the rhetoric and hostility generated by the land-use battles we had been fighting against each other. The idea for the meetings seems to have originated in December 1982, toward the end of a successful campaign to stop the largest development ever proposed in our region — the 540-acre Frates Ranch subdivision on prime agricultural land in California just outside the town of Petaluma's "ultimate" expansion boundary.

Two of the developers approached one of our members, requesting an opportunity to get a better understanding of what it was that we wanted and why we were putting so much energy into damaging their operations. They convinced us that they were ready to make a sincere effort to listen to our point of view, and that they wanted an opportunity to explain theirs.

From the first meeting it was made clear that the developers did not want to be treated as representing any of the developer organizations of which they were officers. I later came to understand that their need for anonymity went even deeper than I had suspected. In their community they had something to lose if it became known that they were "fraternizing" with us. I didn't feel the need myself, perhaps because one of my Irish ancestors was reported to have kissed the Blarney Stone one too many times, but I have come to value the way anonymity releases people from some of the strictures their culture imposes on them.

We agreed to hold a series of meetings, with each side inviting two more participants. Our first meetings were in private homes or offices after work, a couple of times a month. The developers included two developers, an industrialist, and a financial person. The environmentalists included, in addition to myself, a doctor, a businessman, and a computer lab supervisor, all of whom have had public exposure fighting various battles. Rotating members have included a lawyer and the director of a nonprofit organization.

We have tried different meeting formats, including a rotating chairman who was allowed to use whatever format seemed appropriate. All these formats have been useful, but the best sessions resulted in the stimulation of ordinary conversation, ranging from simple

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You know you are involved in local politics when you cease to distinguish between your adversaries and your friends. Bioregionalist Jim Sullivan practices local land-use politics among friends and foes as a landscape contractor in Northern California. His account first appeared in the Fall 1984 issue of Ridge Review, *a thoughtful bioregional journal ($7/year [4 issues] from P. O. Box 90, Mendocino, CA 95460).* —*Kevin Kelly*

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explanations to hot arguments to scholarly discourses, and even occasional attempts to "one-up" the other guy.

The early sessions were stimulating and educational for all of us, but now, with two years under my belt, I must admit that the depth of relationship has also been valuable. Making friends across our differences without relinquishing our basic points of view has allowed us to come together at many times in many moods. We have shared death, financial problems, personal celebrations, vacations, religion — all the while dealing with our basic conflict over land-use issues. If it is illuminating to observe one's own thinking from different emotional and intellectual perspectives, it is all the more so to observe others, especially your "enemy."

One question we have asked ourselves from time to time: Has Pogo had any impact on the community? We are split on this one. Some of the environmentalists feel frustration over not being able to emerge from these sessions with some joint agreement in the practical world. But I know my own performance in the political world has been affected; I feel that I am in better contact with what (for lack of a better word) I will call reality. Like many leaders, I have occasionally gotten caught up in my own rhetoric. For that, Pogo has been a good antidote, without stripping away my concerns or beliefs.

Over lunch recently, one of the developers told me that he has noticed a toning down of the extremist rhetoric that goes on at some of their meetings. He attributed this to Pogo. This speaks to one of my personal goals — development of community forums that encourage rational discussion on some of the critical issues facing us, not so much to foster discussion among "our own kind," but to promote discussion with the "enemy." Somewhere down in my soul I have never discarded the faith that if people will find some way to sit down and talk about their differences, fundamental changes can occur. This certainly does not occur in the local media, which so far has remained immune to any influence from Pogo.

Recently Pogo has begun talking about how to expand some of its processes into the community. I imagine that all of us share the fantasy of spontaneous little Pogo groups popping up here and there where other processes don't seem to be resolving problems. I hope the expansion happens. For while I certainly don't believe Pogo can really solve the land-use and social problems our society is facing, I also lack faith in our present techniques — especially from the point of view of the environmentalists. California state Senator peter Behr summed it up: "All victories for the environment are temporary . . . and all victories for the developers are permanent."

What Pogo can do is to improve the quality of the public dialogue.

I think we need to maintain our political vigilance and back it up with aggressive action — but something more is also needed. Victory alone is not enough. What is needed is formation of a public consensus about how we are going to live on this land. And this is a task for conversation and dialogue, not political victory. ■

27 GATE FIVE ROAD SAUSALITO CA 94965

AUTOMATIC VOTER REGISTRATION

☒ EFFICIENT ☒ FAIR ☒ POSSIBLE NOW

by David D. Schmidt

IN THE DEMOCRACIES OF EUROPE AND CANADA, registration of all eligible voters has for decades been a responsibility carried out by the government. Here in the United States, however, almost every state has hewn to the archaic practice of denying voting rights to anyone who fails to jump through the various hoops set up by the confusing hodgepodge of registration laws. Antiparticipatory voter registration procedures have become even more ludicrous in an age when the average high school computer class student could easily design a program that would automatically register every eligible American by merging address lists already used by government agencies.

Every election year, volunteers, public interest groups, and foundations pour their time and money into voter registration drives. In 1984, as usual, they struggled mightily to push the number of registered voters higher than ever up the inaccessible peak of universal registration. And in 1985, as usual, registration levels rolled back down the slope due to the post-election purges of nonvoters from lists. In Arizona, however, advocates of increased voter registration have kicked the habit. They no longer sponsor voter registration drives because they aren't necessary. Arizonans have entered the age of automatic voter registration.

In 1979 John Kromko, a night school instructor of computer programming at a Tucson business college (now an Arizona State Representative), came up with the idea of having the state's Department of Motor Vehicles stamp each new or renewed driver's license with the applicant's voting precinct number, so that the license could be used as a voter ID card on election day — and no further registration would be required. When the state legislature didn't cotton to the idea, Kromko launched a statewide petition drive to put it on the ballot as an initiative. The drive fell just short of the number of signatures required to qualify for the 1980 ballot.

For once, here's a sensible idea from Washington, D.C. It comes via David D. Schmidt, who heads the Initiative Resource Center there (4607 Connecticut Avenue NW #719, Washington, DC 20008; 202/364-2402). The Center promotes the process of initiative balloting (grassroots petitions) as a way to implement virtually any proposed law, and advises activists in using this technique.

—Kevin Kelly

The next year, Phoenix lawyer Les Miller took up the cause, rewrote the bill, and launched another petition drive to put the measure on the 1982 Arizona ballot. This time the drive was successful. Voters passed it with 54 percent of the votes — hardly overwhelming, but not bad for a state so conservative that the electorate rejected a nuclear weapons freeze initiative on the same ballot by 59 percent.

The new law took effect March 29, 1983. Since then, Arizona Department of Motor Vehicles staffers have asked each driver's license applicant, including renewal applicants, if he or she is registered to vote. If the answer is no, the applicant is asked if he or she would like to register and handed a card to fill out and turn in with the driver's license form. During the first six months, 66,609 people registered to vote this way, even though all the traditional channels of voter registration remained open. In rural Navajo County, populated mainly by Hopi and Navajo Indians whose voter registration levels were among the worst in the state, nearly a quarter of all license applicants registered.

But getting people onto the voter lists is only half the battle in voter registration. Keeping them on the lists even if they fail to vote is equally difficult. Arizona's Motor Voter law solves that problem, too. When county election officials purge the names of nonvoters after each election, they must run a computer check of purged names against the list of people who hold valid driver's licenses. Anybody who has a driver's license stays on the voter registration list, even if that person neglected to vote.

In the last few years, seven states — including

Michigan, Minnesota, North Carolina, Ohio, Washington and Colorado — have adopted new procedures allowing people to register to vote when they get their driver's license, but none have proven as effective as the Arizona version.

The reason for this is simple. Arizona's version comes the closest to automatic voting registration. Citizens no longer need to go out of their way to register to vote. Indeed, even the requirement of filling out the form could be eliminated in the future. Driver's license lists could easily be merged by computer with voter registration lists and other lists (such as resident aliens and taxpayers) to update addresses and weed out ineligible people, thereby producing a list of all eligible citizens. Everyone on this list could then be automatically registered to vote.

The only obstacle in the way of automatic voter registration is the reluctance of politicians to enfranchise any new voters who might not support them. But even this can be overcome in states like Arizona, where citizens can use the initiative process to pass a law directly by citizen petition and popular vote. In 1984, Coloradans passed a Motor Voter law by initiative vote, and Representative Kromko says activists in other states have contacted him to talk over plans for passing such laws.

The Democratic Party in particular has an incentive to back automatic voter registration. Even though the new crop of voters would not necessarily register as Democrats, the party would at least be spared the expense of competing with the Republicans' high-priced, high-tech efforts to register conservatives — a rivalry the financially strapped Democrats can't hope to win. Republicans, too, may come to accept the principle of automatic voter registration, in view of the meager results of their just-completed Operation Open Door. The GOP aimed to register 100,000 new Republicans at a cost of $7.50 apiece — three quarters of a million dollars — but it failed.

So far, the momentum behind automatic voter registration is hardly what one could call a national sensation. But one day, the financial backers of both major political parties will realize they could spend more money on *influencing* voters if they spent less *registering* them. ■

For more information on Motor Voter and automatic voter registration, contact the Initiative Resource Center, 4607 Connecticut Ave. NW #719, Washington, DC 20008 (202/364-2402).

A Citizen Legislature

KEVIN KELLY: The devoutly pious Amish have elected their pastors (leaders) by lottery for a century. Served them well, it has. If random selection works in the legal system for jurors, why not for politicians? Read this book for both sides of the argument.

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It happens that there is an easy and even inexpensive way to choose representatives for a legislative body so that they would in fact be a "transcript" of the whole society: *sortition*, or selection by lottery, which was used by the Athenians to choose representatives for two centuries. The time has come to examine this type of direct representation as a possible way to bring the whole people's voice to Washington.

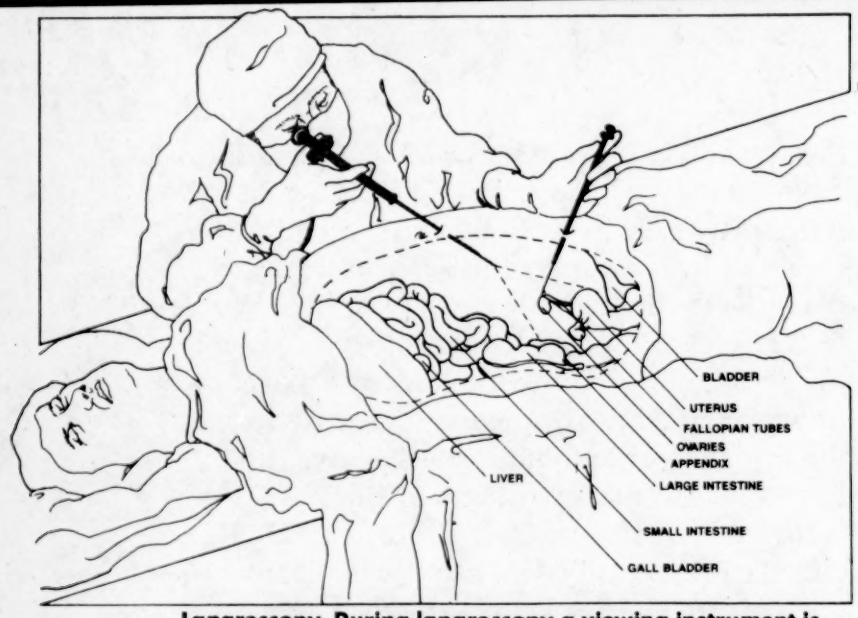
•

A Representative House would be astonishingly different from its predecessors. Upon entering the House chamber you would see at work a body whose members comprise more than 50% women and some 12% blacks, 6% Hispanics, and 1% persons of other races. Because of their dress and manner, your overwhelming impression would be of middle- and working- class people. About a quarter of the body would be blue-collar workers, some of them accustomed to the rigors of debate in community meetings and union halls.

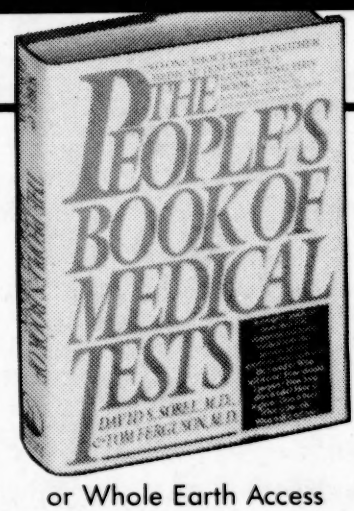
•

Despite the populist rhetoric, I find your entire proposal to be disturbingly contemptuous of the people. Like it or not, the present congress (which you obviously despise) was elected by large numbers of the very people whose wisdom and good judgment you extol. I agree that its composition is not even an approximate transcript of the population at large, but I wonder (I am not certain) whether this does not represent the will of the people. It is at least worth considering whether the people in electing the kinds of congressional candidates they do have deliberately chosen not to be governed by their barber, their accountant, the unemployed derelict who hangs around the neighborhood liquor store, or the nice lady who runs the cosmetic counter at Woolworth's. Perhaps the reason they elect the people they do is not because they are stupid or duped, but because they *want* to be ruled by people whom they perceive (however mistakenly) as successful, powerful, and capable, and in our culture these people tend to be wealthy, white males often with a background in law. Such people do not represent my own ideas of excellence, and I personally believe most of the choices made by our electorate are wrong. But I am deeply enough committed to the democratic process to believe that the rights of people to choose their own leaders must be respected and defended, and (however grave its short-comings) is vastly preferable to your patronizing idea of having the choice made for them by the laws of random selection.

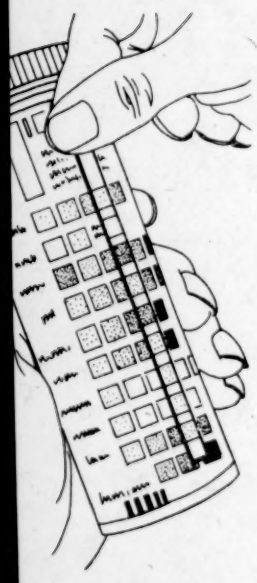
A Citizen Legislature
Ernest Callenbach & Michael Phillips
1985; 96 pp.
$6.00
postpaid from:
Banyan Tree Books
1963 El Dorado Avenue
Berkeley, CA 94707
or Whole Earth Access



Laparoscopy. During laparoscopy a viewing instrument is inserted into the abdomen and the internal organs are examined.



The People's Book of Medical Tests
David S. Sobel, M.D., Tom Ferguson, M.D.
1985; 510 pp.
$12.95
($14.40 postpaid) from:
Summit Books
1230 Avenue of the Americas
New York, NY 10020
or Whole Earth Access



The People's Book of Medical Tests

KEVIN KELLY: It's your choice: A possible disease or a dangerous diagnostic test — either of which may be detrimental to your health. Before slipping into a hospital gown, I'm going to consult this book. It tallies up the recognized risks of common medical tests (pain, expenses, and complications). It'll also give the honest details of each procedure, its preparation, and the normal range of results so I can ask the doctor intelligent questions afterwards. It could help me avoid an unnecessary operation or medication, and for that I'll give it my kiss of eternal gratitude.

Coauthored by Tom Ferguson, former Whole Earth medical editor, one quarter of this book addresses medical tests that can be done at home and evaluates them in the same careful manner.

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The first and most important question should be whether you really need the test at all. Before agreeing to any test you should ask your doctor, "What will we do if the test results are abnormal?" and "what will we do if the results are normal?" If the answer to both questions is the same, you probably do not need the test.

Unnecessary tests not only are a waste of money but also expose you to unnecessary discomfort, inconvenience, and risk. Some investigators believe that as many as 9% of all tests are performed by doctors to protect themselves from the threat of malpractice suits. An American Medical Association survey revealed that at least three out of every four doctors admitted ordering tests for the sole purpose of having a better defense in the event of a subsequent malpractice trial. Such concerns are not totally unjustified.

Home Urinalysis. After dipping the reagent strip into a urine specimen, the color changes of the reagent pads on the strip is compared with the standard color blocks on the reagent strip container.

Take This Book to the Hospital With You • Medical Access

KEVIN KELLY: When hurt, maybe dying, who doesn't tend to kowtow to someone who offers to make everything ok again? The illness of modern medicine is that it abuses this time of natural deference. It has forgotten the patient as part of the cure. ***Take This Book*** *stridently urges all bodies to restore their role in the healing wards. Take this book to the hospital with you and you'll make yourself a better patient, your doctor a better doctor, and your hospital a better place to get well.*

For your entertainment during a hospital stay, turn off your TV and watch the metabolism of the hospital itself — circulating nurses, calculating high tech equipment, endless instruments spying into visiting bodies — it's a Star Trek into biology. ***Medical Access*** *is your TV Guide to the flashy commotion. Done in the same design style as the rest of the* ***Access*** *travel guide series, this is a good browse through the exotic land of hospital medicine.*

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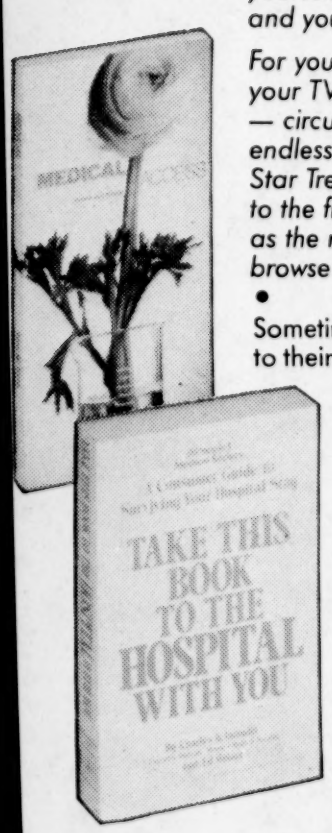
Sometimes descriptives medical people use in referring to their patients and their patients' conditions are couched in a colorful code that is hard for the uninitiated to crack. For example, "L.O.L." is noted next to your name on your chart. You ask your nurse what it means. She turns a couple shades of crimson. "L.O.L." is medicode for "Little Old Lady." This signals those reading the record that you are a nice, perhaps cheery, certainly passive, unquestioning, and utterly compliant female senior citizen.

A "gomer" is, according to one medical lexicographer, the nickname given to a "real dirtball patient." It is the acronym for "Get Out of My Emergency Room."

In medicode, a "delightful" patient is one who does anything anybody tells him or her to do and never asks questions. The same goes for those patients described as "pleasant."

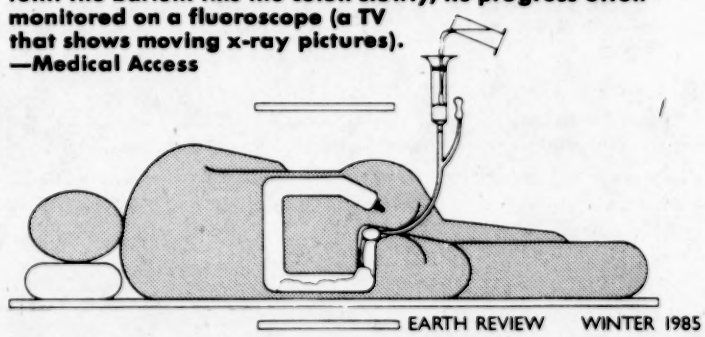
A "turkey" is something quite different. A turkey is *you* — a patient who asks a lot of questions, demands respect, knows his or her rights, and won't stop wanting to be a part of his or her own healing care. In other words, a smart and careful medical consumer. This is somebody many doctors and nurses happily could do without. Turkeys of the world, we salute you. —*Take This Book*



Take This Book to the Hospital With You
Charles B. Inlander
1985; 221 pp.
$9.95
from:
Rodale Press
Organic Park
Emmaus, PA 18049

Medical Access
Richard Saul Wurman
1985; 120 pp.
$9.95
($11.40 postpaid) from:
Access Press Ltd.
P. O. Box 30706
Los Angeles, CA 90030
both from
Whole Earth Access

Barium Enema:
A regular abdominal x-ray is taken first. Then, you lie on your side while a lubricated nozzle is eased into your rectum. The barium fills the colon slowly, its progress often monitored on a fluoroscope (a TV that shows moving x-ray pictures).
—Medical Access



Maggie's Back Book

Low Back Pain Syndrome

TOM FERGUSON, M.D.: One of the questions we're most frequently asked at ***Medical Self-Care Magazine*** *is this: Can you recommend a good book for dealing with a bad back?*

Our standard answer: Start out with the short and straightforward ***Maggie's Back Book****. Follow the exercises to the letter. This should take care of most short-term sprains and strains. If you're troubled with repeated or continuous back problems, or if you'd just like to read up on the subject in more detail, get a copy of Dr. Callient's* ***Low Back Pain Syndrome****. Callient's book, written for physical therapists and physicians, provides an advanced course on the anatomy, diagnosis, and treatment of low back pain.*

KEVIN KELLY: Understanding pain in other joints of your body is aided by the rest of this thorough series. By ploughing through the technical terms with a medical dictionary, you should be able to visualize what's hurting you.

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Elastic properties of the disc are considered to reside in the elasticity of the annulus rather than in the fluid content of the nucleus. In a "young" and undamaged disc the fibroelastic tissue of the annulus is predominantly elastic. In the process of aging, or as a residual of injury, there is a relative increase in the percentage of fibrous elements. As the relative increase of fibrous elements occurs, the disc loses its elasticity, and its recoil hydraulic mechanism decreases. The "older" annulus reveals a replacement of the highly elastic collagen fibrils by large fibrotic bands of collagen tissue devoid of mucoid material. This disc, is, therefore, less elastic.

—Low Back Pain Syndrome

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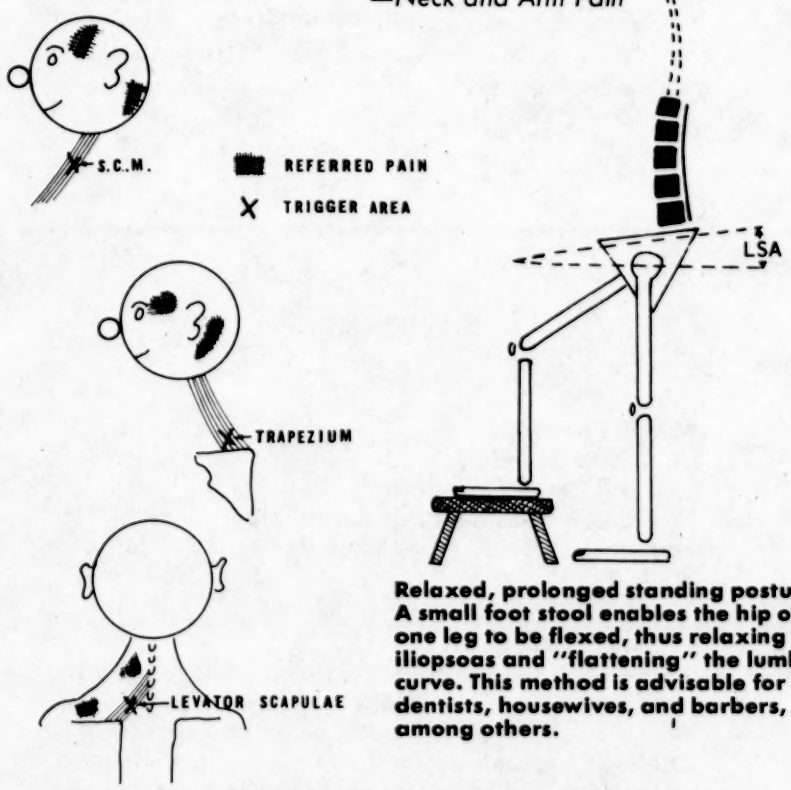
To know the normal and to recognize deviation from normal; to be able to reproduce *the* pain by reproducing the abnormal position or movement; to understand the mechanism by which *the* pain is caused — this is the formula for clinically evaluating the patient complaining of pain and dysfunction of the neck, shoulder, and upper extremity.

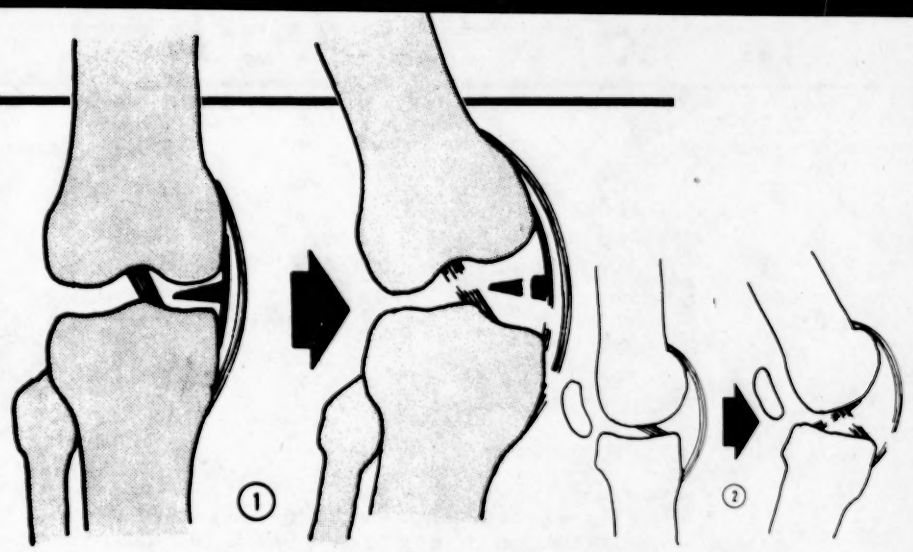
—Neck and Arm Pain



Relaxed, prolonged standing posture. A small foot stool enables the hip of one leg to be flexed, thus relaxing the iliopsoas and "flattening" the lumbar curve. This method is advisable for dentists, housewives, and barbers, among others.

Trigger points and referred pain. Tender areas in various areas of the neck and shoulder when irritated can refer pain to distal sites.

—Soft Tissue Pain and Disability



Severe ligamentous sprain (the unhappy triad). 1, Lateral stress causing disruption of the medial collateral ligament, the medial meniscus, and the anterior cruciate ligament (the unhappy triad). 2, Lateral view of a severe anterior stress causing hyperextension of the joint and disrupting both anterior and posterior cruciate ligaments and the posterior capsule.

—Knee Pain and Disability

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The fluids in the disc become less fluid (like cold gelatin) with insufficient movement; ligaments contract slightly and muscle tone changes.

If you lie still for too long even in a good position, your back gets stiff and harder to move. It is good for you to begin small pain-free movements as soon as possible.

—Maggie's Back Book

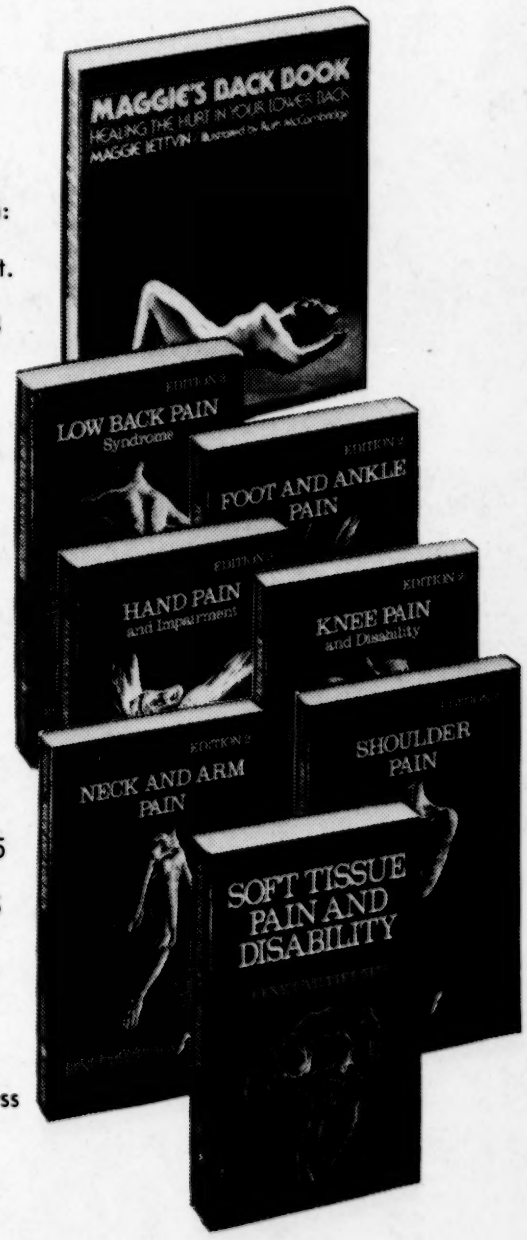
Position 1 can give you the most freedom from pain for the longest period of time. If you use it wisely and at the proper time, it can, in many cases, completely free you of pain. Though this position may stop your pain, it will not solve your problem. It will prepare your body for the exercises that usually can solve your problem by making your back more flexible. Freedom from pain comes first!

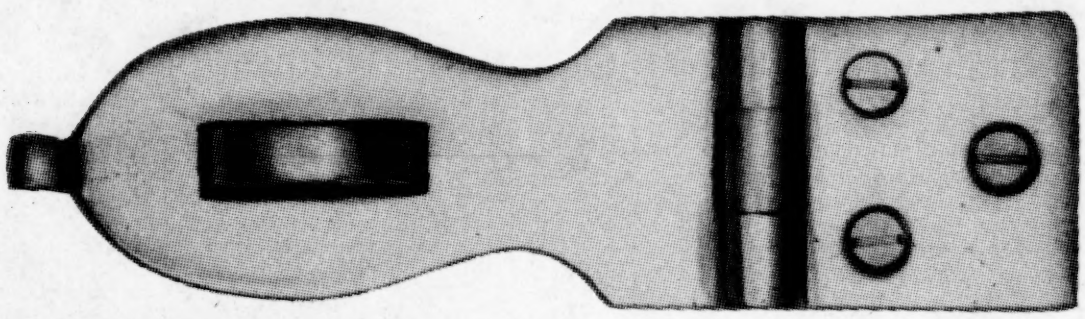
—Maggie's Back Book

POSITION #1

Maggie's Back Book
Maggie Lettvin
1977
$8.95
($9.95 postpaid) from:
Houghton-Mifflin
Attn: Mail Order Dept.
Wayside Road
Burlington, MA 01803

Low Back Pain Syndrome
Rene Callient, M.D.
1981; 230 pp.
$12.95
Also Available:
Foot and Ankle Pain, $11.95
Hand Pain and Impairment, $11.95
Knee Pain and Disability, $11.95
Neck and Arm Pain, $10.95
Shoulder Pain, $10.95
Soft Tissue Pain and Disability, $14.95
from:
F. A. Davis Company
1915 Arch Street
Philadelphia, PA
19103-9954
or Whole Earth Access



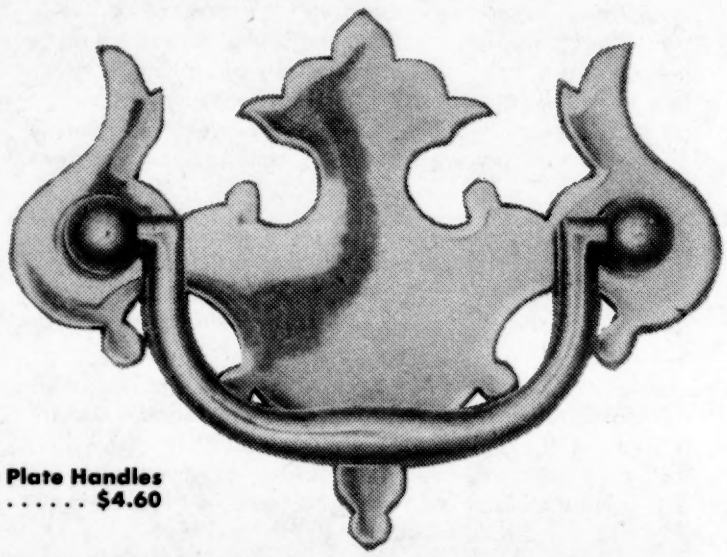


Classic Hardware
(A Design Guide
for Craftsmen)
Catalog **free** from:
Garrett Wade
161 Avenue of
the Americas
New York, NY 10013

Cast Standard Decorative Hasp
This is a handsome hasp with a 5/16" keeper hole. Typically surface mounted, it can also be mortised. Leaf thickness 1/8". Hasp sized 4.1/2" x 1.1/4". $8.95

Classic Hardware

STEPHEN SEITZ: Being primarily a "design-as-you-go" craftsperson, I got particularly excited about this hardware catalogue from Garrett Wade. The color photographs of their British- and North American-made hardware are reproduced in full scale. That means I can cut out the pictures, place them on my piece of furniture, or whatever, and see exactly what I'll be getting — no surprises!



Smooth Face Cast Plate Handles
3" Smooth Cast $4.60

Allen Specialty Hardware

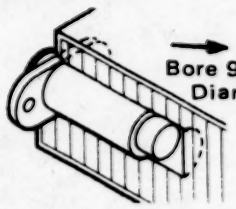
STEPHEN SEITZ: Several people have asked me to build video cabinets with "Lazy Susan" bases so the T.V. monitor can be turned toward the viewer. The design problem is how to provide enough clearance to turn a television set without building a cabinet the size of a small outbuilding. One solution is an extension slide with a built-in swivel. This allows the T.V. to slide out of the cabinet before it is turned, reducing the amount of clearance required (some counterbalancing is usually needed.) These extension slides and many other hard-to-find items (concealed hinges, folding leg devices, etc.) are available from this unpretentious mail order catalog.

Allen Specialty Hardware
Catalog **free** from:

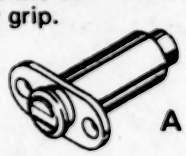
Allen Specialty
Hardware
332 W. Bruceton Road
Pittsburgh, PA 15236

Concealed hinges for wood and glass doors.

MAGNETIC PUSH LATCHES

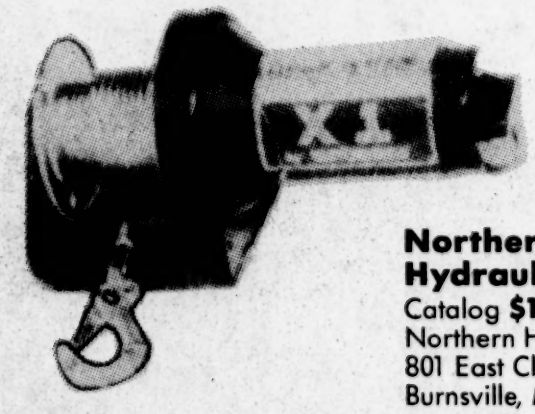


A Gentle Push To Open
A Gentle Push To Close
Opens the door for easy
finger grip.



Northern Hydraulics

J. BALDWIN: This company offers an unusual assortment of hydraulic parts (as in make-your-own log splitter), small engines, tools, and (Oh boy) parts needed for making utility trailers. Some of this stuff is hard to find even in larger towns and small cities. Prices seem OK too.



Northern Hydraulics
Catalog **$1** from:
Northern Hydraulics
801 East Cliff Road
Burnsville, MN 55337

•
Snow Plow Cylinders
Monarch CS150-6 Cylinder
6" stroke, standard lift cylinder for most plows. 13" center pin distance, $^{49}/_{64}$" pin hole size. $1^{1}/_{2}$" bore. Single acting. $52.95

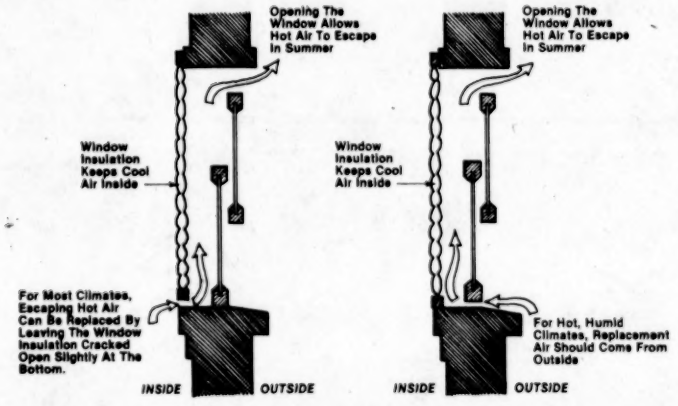
•
Model X-1 Winch
Has 1,500 lb./680 kg. working load. 2,500 lb./1134 kg. stall. Most economical vehicle wince available! Winch mounted switch with 5' leads. Design proven: over 550,000 units sold! Design permits mounting in almost any position. 1.3 HP motor, to 12 (or 24 special order) voltage, 123:1 gear ratio, cable is $^{3}/_{16}$" x 25'. It has a breaking strength of 4,200 lbs. Power in/out only.
Price $159.95

Window Insulation

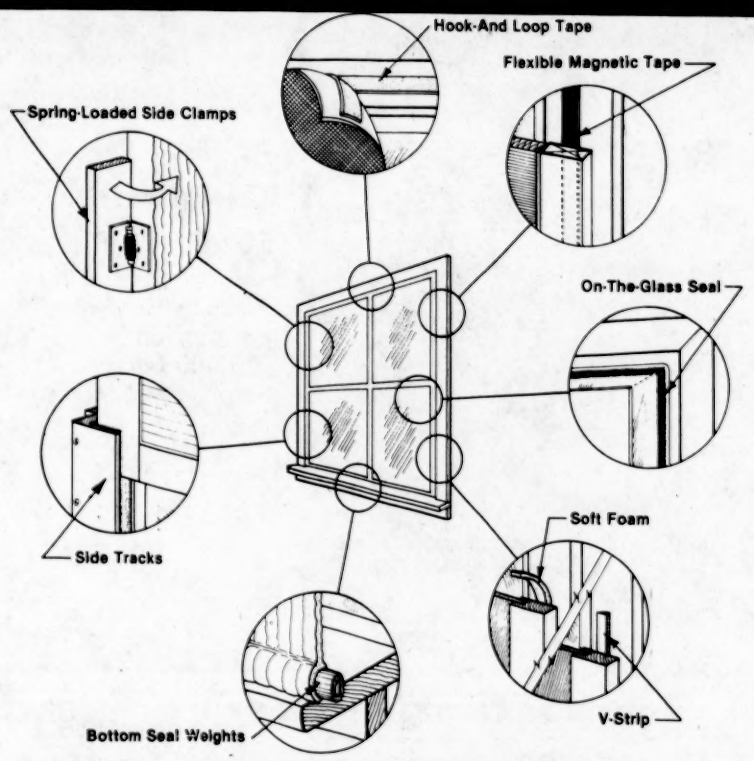
J. BALDWIN: On the theory that a customer won't buy anything if there are too many options, our government has prepared this guide which should help you cut things down to size. It's better than I expected.

Window Insulation
(How to Sort Through the Options)
1984; 34 pp.
$2.50 postpaid from:

Superintendent of Documents
U.S. Government Printing Office
Dept. 33
Washington, DC 20402



When using sealed window insulation products to prevent unwanted heat gains, it is important to either open the window covering or the window to avoid damaging heat buildup, depending on your local climate.



These sealing systems are among the many options available for window insulating devices.

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The general rule is: Don't try to cut costs too much with sealing system components. Higher quality products may cost quite a bit more, but the performance will easily be worth the money. A seal that doesn't work can ruin your project and reduce the insulating value of your product to the point where it is nearly worthless as window insulation.

PV Network News

J. BALDWIN: Joel Davidson has been working for several years now getting together enough orders for photovoltaic panels to make possible bulk purchases at great savings. He's also been putting out a free newsletter that has turned out to be the most valuable source of photovoltaic information for the plain folks. Now the newsletter has gone formal and it's well worth it. It is very encouraging to see one person take on a job like this for all of us.

The November '85 issue has over 200 listings of catalogs, dealers, manufacturers, books and magazines, and may be purchased individually for $5.

PV Network News
Joel Davidson, Editor
$15/year
(4 issues) from:

PV Network News
Rt. 2, Box 274
Santa Fe, NM 87501

Tandy 200 Portable Computer

BIRRELL WALSH: This is THE handy computer. The 200 is a very sturdy, portable tool, while others of its kind are made like Crackerjack prizes. It has a fold-up screen with a 16-line x 40-character display — as good an LCD as I have seen. In addition to built-in word processing, telecommunications and spreadsheet software, the ROM contains MICROSOFT BASIC, an address book that can be used for autodialing, and a schedule with an alarm that works even when the computer is turned off. The whole system operates on four AA batteries.

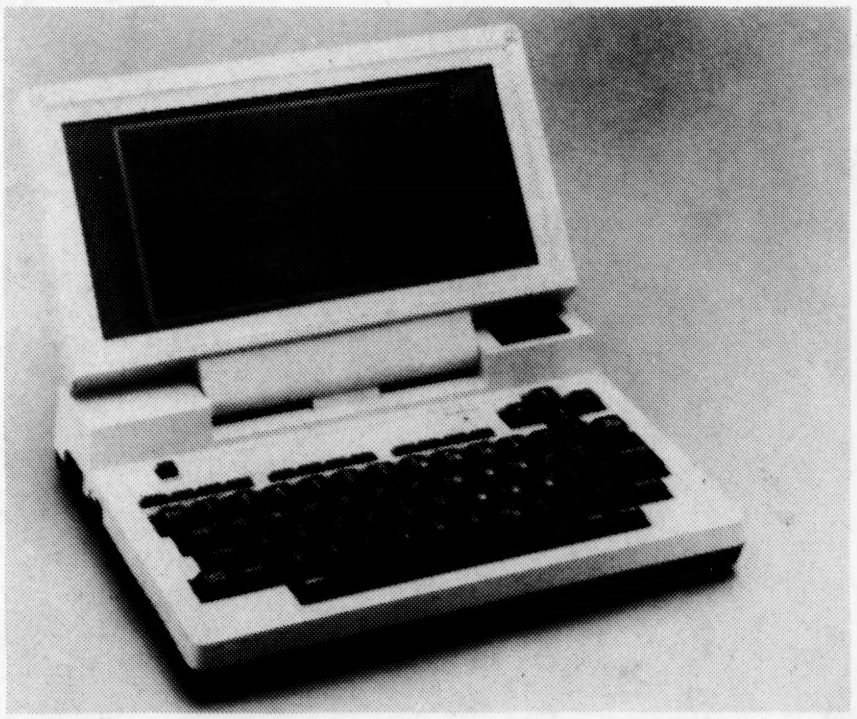
I'm writing this in the shotgun seat of a television truck, using the Tandy 200's built-in text software. Tonight this review will be sent as electronic mail through the 200's built-in modem.

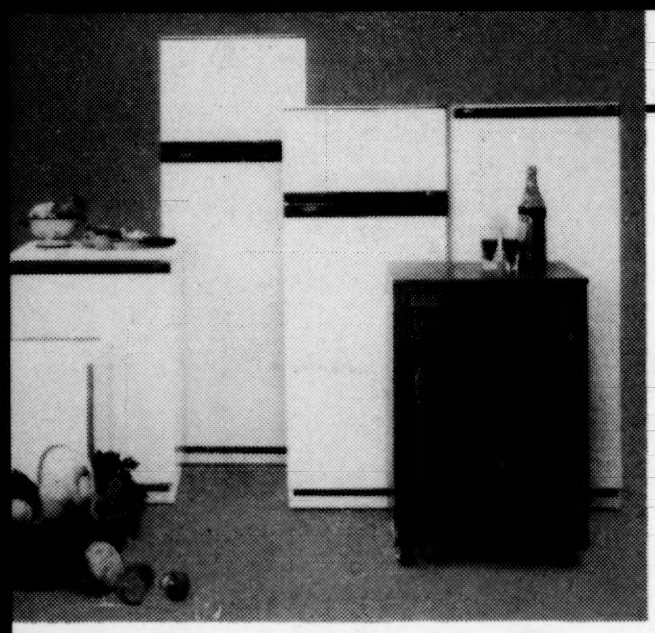
When we did a television story on Kesterson, a wildlife refuge in California's Central Valley contaminated with toxic agricultural drainage, the figures sounded phony to our expert. Standing in the selenium dust, we used the 200's ROM version of MULTIPLAN to build a mathematical model of the evaporation ponds adjacent to the refuge. The model showed that less water was evaporating from those ponds than was draining into them. With our cameras we found the contaminated water was leaking through the containment dikes.

This is a Radio Shack product. All the experience of Radio Shack's Model 100 — years of user feedback — has been built into the new Model 200. The 24K memory can be expanded to 72K. I use the 200 more than twice as much as the computer on my desk.

Tandy 200
$999
(street price $750)
Information **free** from:

Tandy Corporation
Radio Shack Division
One Tandy Center
Fort Worth, TX 76113





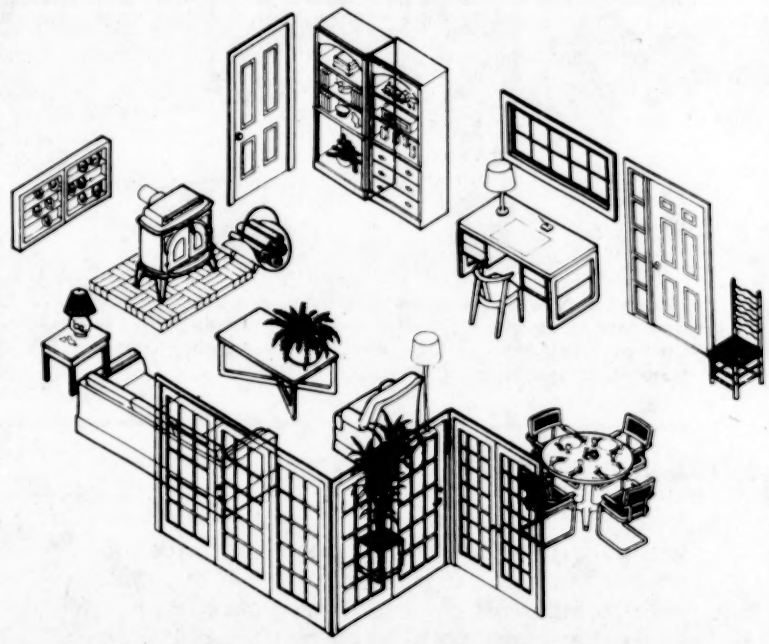
Sibir Refrigerators
$899
Information **free** from:
Lehman's Hardware and Appliances
47780 Kidron Rd.
Kidron, OH 44636

Sibir Refrigerators

J. BALDWIN: These high-quality Swiss-made, family-size refrigerators can be had in non-electric propane and kerosene, or low-voltage electric models. They're more economical and just plain nicer than the competition, mainly concerned with the RV market. The U.S. supplier, Lehman's Hardware and Appliances, Inc., has a solid reputation amongst the Amish, who don't mess around when it comes to this sort of thing. AGA approved, for you code-meeters. They aren't exactly cheap, but keep in mind the quality, economy (the kerosene model only uses 3/4 quart a week!), and the fact that they have no moving parts to wear out. They don't make any noise either.

Interior Design Kit Series

J. BALDWIN: The eminently useful Architect's Drawing Kit we noted in **WER** *#46 (p. 72) now has a sibling. This kit consists of little images of furnishings drawn for you in perspective. With the aid of the kit, just about anyone can design a room and push the furniture around with no danger of a shamefully slothful "looks good right there" or hernia. If you're working up that dream house, you can save much time and future hassle with this sort of planning. The resulting perspective "drawings" are a big help in visualizing various alternatives, but remember that this sort of planning-by-menu can lock you into unimaginative proposals if you let it. You're the boss.*



Interior Design Kit Series
Daniel K. Reif
$14.95 each kit postpaid from:

Design Works, Inc.
11 Hitching Post Road
Amherst, MA 01002

or Whole Earth Access

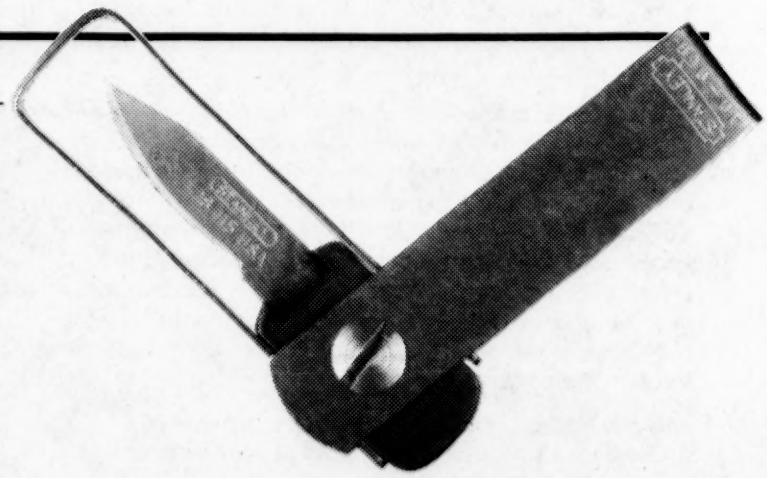
Sioux Angled-Chuck Drills
Catalog **free** from:
Sioux Tools Inc.
P. O. Box 507
Sioux City, IA 51102
or local Sioux Tools distributors

Sioux Angled-Chuck Drills

PHILIP DOUGAN: I had long forgotten the ever-benevolent Shmoos in the Li'l Abner cartoon strips of my youth until I noticed a certain distinct resemblance in these drills. The Sioux offered inherent right-angle drilling capacity in addition to the versatility of a small, variable-speed, ½" drill, so I laid my money down. Since then it has been the only drill that I use (or own) in doing general remodeling work. As I initially suspected, the drill's ergonomics are excellent (with the exception of an easily corrected flaw — cut enough of the top of the trigger off to allow your index finger to wrap around the neck of the drill), and during extended use, it is very easy on the wrist. Although less well known in the construction trades, Sioux is a well-established manufacturer of industrial tools. They're a little hard to find but they're worth looking for.

Stanley Folding Pocket Knife

PAUL OPPENHEIM: This has to be one of the best hardware values going. Flat, light, all stainless steel and it disappears into a back pocket. Locks open via a simple, ingenious design. While the blade is replaceable, I've sharpened mine many times.

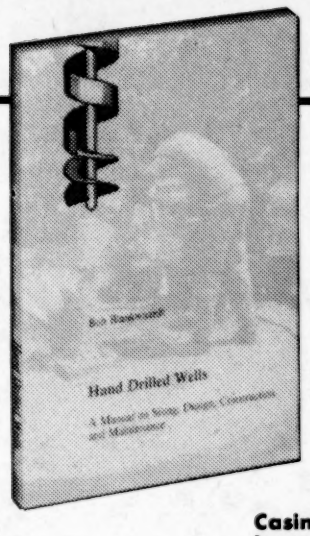


Stanley Folding Pocket Knife
$3.65
(approximately)

Information from:
Stanley Tools
Division of
the Stanley Works
New Britain, CT 06050

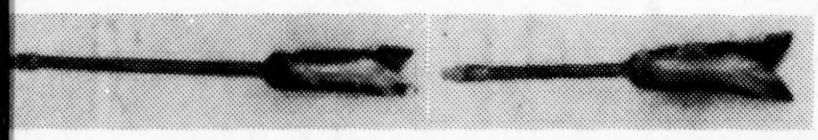
Hand Drilled Wells

J. BALDWIN: This Tanzanian manual is typical of a very welcome new breed of books that speak from extensive experience rather than recommending what some university lab thinks ought to work. Recognizing that much more than just hardware and technique must be addressed, the book includes village education, how to determine the requirements, locating water, making the well, and working up the infrastructure that will maintain and service it. It's written in a logical manner that enables any literate, reasonably intelligent person to bring in a sanitary water supply — by hand. The methods will work anywhere the ground is drillable and the water isn't further down than 30 meters. Happily, the book is utterly free of paternalistic tone and technical mystery so that all concerned can learn not only the necessary procedures but the reasons for them as well. All this is quite a contrast to what was available only a few years ago. I recommend it highly to anyone who will be involved in a project outside our culture, even if well-drilling isn't the matter at hand; the book is a model of how to get things done.

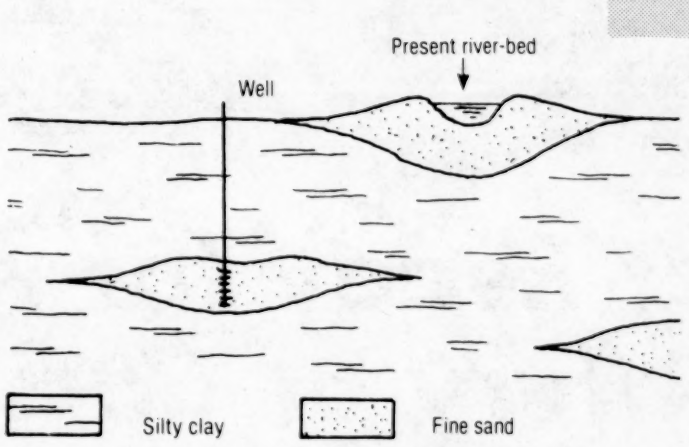


Hand Drilled Wells
Bob Blankwaardt
1984; 132 pp.
$10
postpaid from:
TOOL Foundation
Entrepotdok 68A/69A
1018 AD Amsterdam
The Netherlands

Casing sections are unscrewed by means of a chain spanner.



This stone auger consists of two long blades, pointing slightly outwards. Although the auger is of very sturdy construction, the blades are fairly flexible so that stones can be loosened and lifted up.



Buried riverbeds offer good prospects for wells.

The AT Reader

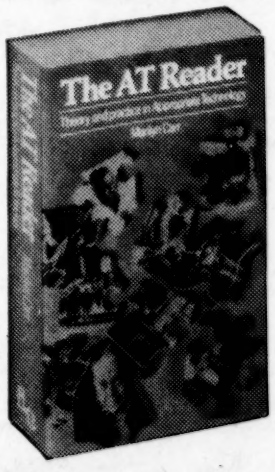
J. BALDWIN: Alternative technology has grown up at last. This rousing collection of successful praxis and heart-rending disaster is a wonderful antidote to the righteous naivete that all too often failed in its "answers" to technical problems in less developed nations. It's rare that I encounter a book that I'll tout as "must reading," but this one is if AT is your game — especially so if you're going overseas on a do-good mission. It's informed, comprehensive, and almost horrifyingly candid. Just what's needed. No bushwah at all. Shows you what a few decades of mistakes can do for your effectiveness. It's enough to give one hope.

•

With the gradual mechanization of fishing technology, Sakthi's economic system lost its basic homogeneity and became increasingly divided between two distinct sectors: the traditional and the modern (mechanized) sector. While in the former sector fishing assets are basically considered as instrumental in providing employment opportunities to the family unit, in the modern sector they are usually acquired with a view to yielding high private returns in financial terms. Put in another way, with the mechanization of fishing technology, the craft has lost its character of a concrete means of production, employment and survival, to become an abstract economic factor whose handling is clearly dissociated from its ownership. The change in behavioural patterns wrought by the mechanization drive in Sakthi is tremendous: The purchase of a boat is no longer intended to provide its owner with a work-tool and to enable him to become his own master; instead, it is part of an economic strategy aimed at rapid enrichment of the investor.

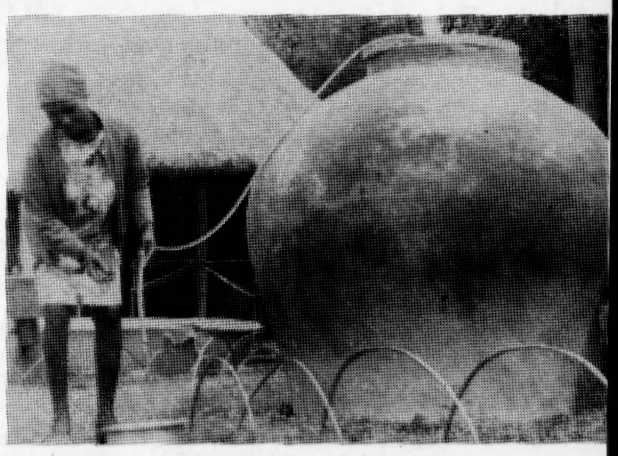
•

The water running off roofs is clean compared to the surface water supplied traditionally used in the village area — especially after the first "flush" of a downpour has been allowed to run to waste. The fine gauze screen over the inlet prevents leaves, beetles and other detritus being washed into the jar and reduces the likelihood of the water becoming a breeding ground for mosquitos. Finally, the natural acidity of most rainwater combined with the beneficial effect of simply storing water under hygienic conditions will do much to ensure that the water is safer than the usual alternatives.



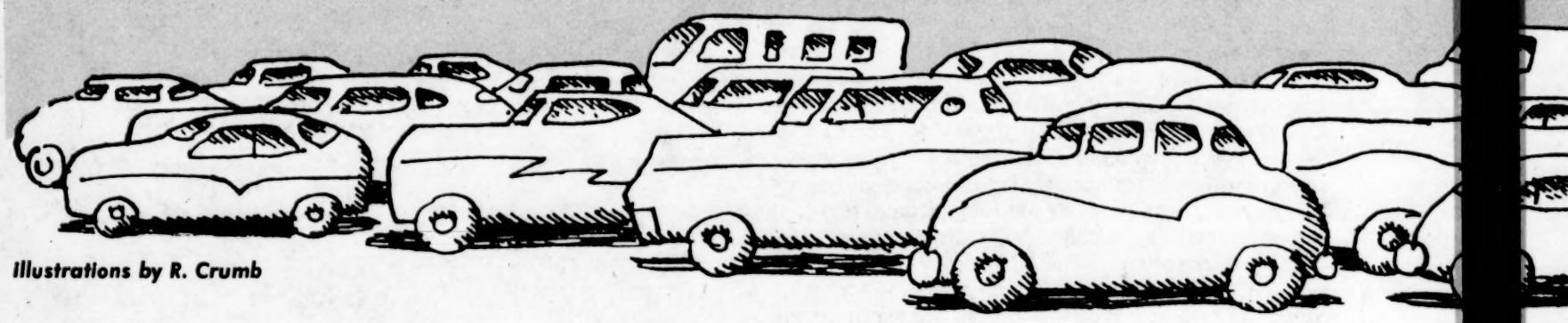
The AT Reader
(Theory and Practice in Appropriate Technology)
Marilyn Carr
1985; 468 pp.
$19.50
($21.50 postpaid) from:
Intermediate Technology Development Group of North America, Inc.
Publications Office
P.O. Box 337
Croton-on-Hudson,
NY 10520
or Whole Earth Access

Better boats: Short-term gains and long-term losses?



Ferrocement jars provide a cheaper way of storing rainwater.

We should quit pretending that cars are a necessary evil of contemporary life and admit that they are a deliberate good, getting better. That's the message I hear from a trio of car-suspicious simple-lifers. Neighbor Joe Troise, who has owned over 300 cars and authored Drive It Till It Drops *(NWEC p. 405), presently hosts the "Garage" conference on the Whole Earth Lectronic Link (WELL), commuting from his houseboat via the phone lines. To get wind on his face he drives a '72 M.G. ($850). When J. Baldwin is not on a bicycle (or building a new one), he rides Yoda, his mulish '83 Toyota hatchback ($8,000). Total repair costs for the first 40,000 miles: 29 cents. All VW questions in this office go to general purpose clerk Dick Fugett, a former VW mechanic, who recently arrived at work in a fabled bargain: a $1,000 '72 Ghia, his 11th Volkswagen. I bought one of Joe's cars, a corpuscle-shaped 1968 Saab ($750). Runs good. Gets me to work 40 minutes before the local bus does. —Kevin Kelly*



Illustrations by R. Crumb

Get Ready for Another Century of Cars

by Joe Troise

WITH THE MODERN AUTOMOBILE about to blow out the candles on its 100th birthday cake (January 1986), it seems appropriate to take a look at the State of the Automobile Nation, which the United States indisputably is and is likely to remain for some years to come. This country never was one for doing anything on a small scale. It is sobering to note that if the entire population of America jumped into their cars simultaneously, nobody would be riding in the back seats. All well and good. We have room for 200 million hitchhikers, should the need arise.

As countless historians and sociologists have told us, when you talk about cars, you're not just talking about machines. Americans have never regarded automobiles as such, Ralph Nader notwithstanding. Very few people gush uncontrollably about their washing machines, typewriters and telephones, and only a handful, relative to the entire population, will babble on about their stereos. Computer lovers may go on and on about their magic boxes, but rarely will they spend the time to even brush a clean rag over them, much less wash and wax them. Hackers are not so much in love with a computer per se as with a concept and a potential; car owners have an attachment that runs as deep and as dark as the rivers of the mind care to go. Status, sex, power, transcendence, death — you name it, and the car will help you play out the fantasy for whatever stakes you lay on the table.

It has been suggested that Automotive History should be part of the curriculum of every school in the U.S. This idea has merit. One could say a great deal about America merely by lining up consecutive pictures of representative cars from

1893,* when the first runnable American autos struggled out of their creators' garages, to 1986, when lightweight, aerodynamic, and outrageously high-tech passenger cars will do 120 mph and better, right out of the dealer's showroom. What would one see in that line-up of 93 drawings and photos?

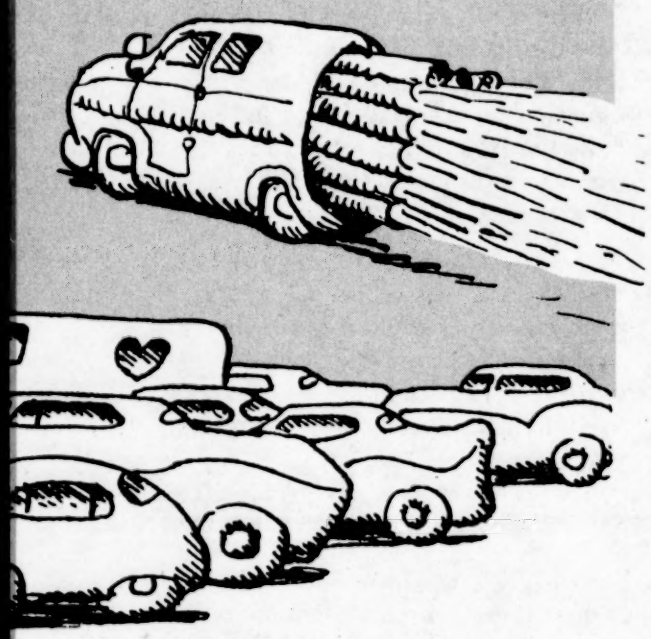
Quite a bit, really — the automobile growing out of both bicycle and carriage technology (early 1900s), the perfecting of assembly line techniques (first decade), the progression from open cars to closed (the 1920s), the demise of hundreds of American automobiles (The Great Depression), the First Automotive Renaissance which saw the rise of fanciful body styling and aerodynamics (the 1930s), the stagnation of new designs during the war years (the 1940s), unparalled American prosperity and industrial growth (1950s and 1960s), the energy crunch (mid-1970s), and the Second Automotive Renaissance in the 1980s.

These are broad strokes, to be sure, but within those eras are more complicated phenomena, like Vietnam and the concurrent Rise of the Muscle Car, and the emerging influence/affluence of the baby-boomers (no, I won't use the "Y word"). Think for a moment how well our cars have mirrored our culture, as it expands, contracts, twists this way and that, and then goes off in unexpected directions!

It wasn't all that long ago, perhaps ten years, when a great many people were quick to label the petroleum-burning automobile a dead duck in the 21st century. Steam, electric — even solar cars would lead us down the highway of the future.

A decade later we find the "alternative" car not much farther along than its ancestors of 60 years ago. America's finest steam car, the Doble, could in its

* The first car was German, built by Otto Benz in 1886.



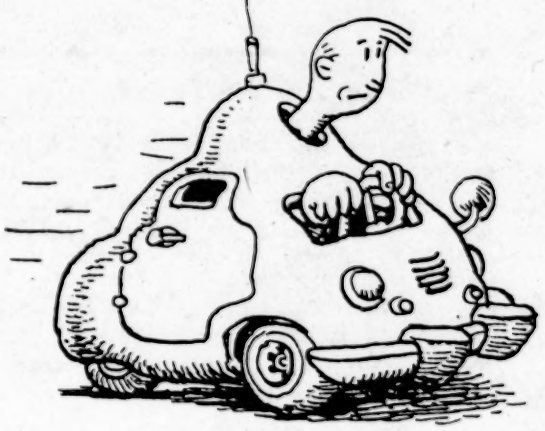
final 1923 form go 1500 miles on 24 gallons of water. A modern steam car would be hard put to match it. Contemporary electrics have done somewhat better than the primitive machines of the 1920s, but when measured against 60 years of progress in other areas of technology, the developmental pace of the electric car has been leisurely, to say the least.

What we have here is history repeating itself. The gasoline car first outwitted its steam and electric competition in 1912 by providing an electric self-starter and a low price. In the 1980s, the gasoline car did it again with the aid of microprocessor technology and the use of lightweight fabricating materials. If there was ever a doubt that the petroleum-driven automobile was going to accompany us into the 21st century, the computer put that doubt to rest, for it provided the means to control fuel consumption and poisonous emissions with a degree of efficiency undreamed of in 1968, when the first federal emissions standards went into effect.

So the resilient automobile is alive and well, cleaner, safer and faster than ever before. For the car-lover, it's almost like having one's cake and eating it, too. Not only can the driver of a 1985 car point with disdain at the filthy tailpipe of a 1965 gas-guzzling V-8 muscle car, but he can probably whip the big guy fair and square, with an engine one-third the size delivering three times the gas mileage. And even if performance is not your desire, some of the most modest of new cars offer interior appointments and safety features that would have truly awed the new car buyer of 20 years ago.

So then, what has been lost? Oh, you know, the usual. There are still too many cars around, fuel-efficient or not, and these machines still determine how we live, where we work, and what our cities look like. Traffic deaths are enormous, though less than they used to be. Now we only lose something like 40,000 people a year, rather than the 50,000 or so of a decade ago.

Probably the worst thing you can say about new cars, other than the expense of buying them, is that you won't be able to fix them yourself anymore. By 1990, you'll have to take them to a service technician who will diagnose everything by computer. No more carburetors or ignition points; no more batteries you add water to or timing lights to flash on spinning pulleys; no more ordinary shock absorbers and ordinary braking systems — computers, computers — running everything, telling you if you're lost, adjusting your car up and down, warning you of every foreseeable hazard. When something malfunctions, it is replaced, not repaired; when the car is old and tired, it will be disposed of, not rebuilt.



The modern automobile still mirrors the world. You sit in apparent command of a most magnificent machine, a pleasurable shelter of velour, fine music, a cosy warmth or a blessed coolness, all at your fingertips. Yet you sense somehow that your self-reliance in this complex civilization has been diminished one more notch. It's not something you'd want to fret about all day, this new wrinkle of consumer-helplessness, but car ads never do get around to the morning after, do they?

With that cautionary note, let's take a look at what's available to help us understand the automotive universe, both past and present. Who knows? We may all get a handle on it yet.

PEACHES & LEMONS

by Joe Troise

Here's a list of what the experts feel are the best buys in a used car for your basic set of wheels. No guarantees here, of course, but picking one of these models at least will increase your chances of having a good experience with a second-hand automobile. What more could you ask for in life?

1. VW Beetle, to 1978
2. Toyota Corolla, Corona, all years
3. Datsun 510, 210, all others except F10
4. Plymouth Valiant/Dodge Dart (also called Demon and Duster), 1964-76
5. Subaru, anything after the early F1 models
6. Chevy Nova, up to 1977
7. Honda Civic, except the 1973-74 models
8. Ford Falcon, 1965-77
9. Dodge Colt, all years
10. Ford Fiesta, all years
11. Buick Opel (by Isuzu *only*)

Thoroughly Rotten Apples

And here's a list compiled recently by *Motor Trend*, which I find to be a fair assessment of some of the world's most awful automobiles. These little mechanical Frankensteins should be avoided at all costs.

1. Chevrolet Vega, 1971-77. This totally reprehensible abortion of a car, brought to you in part by John Z. DeLorean, is a hopeless mess of poor engineering. The aluminum engine on this car can actually MELT, like in dripping ice cream MELT. The body rusts like crazy too.

2. AMC Pacer, 1975-1980. Some people think these cars are kind of cute, but one ride around the block should cure you of that. It's a clumsy, heavy car that gives poor gas mileage, handles like a dumpster on tiny caster wheels, and spits knobs and handles at you with alarming regularity.

3. Audi 100 LS. Who said the Germans never make mistakes? Actually, this car in theory was brilliant, but in execution the offspring of knuckleheads who decided to let the consumer do the research and development. ►

4. Ford Fairmont, 1978-80. A sad case of expedient engineering. The engine is not something you'd want to count on.

5. Porsche 924, 1977-1982. Just what the sensible driver wants! An overpriced, underpowered car with shoddy workmanship. A disgrace to the name of Porsche, or perhaps a testimony to people's gullibility.

6. Plymouth Volare/Dodge Aspen, 1976-80. How anybody could screw up the wonderful Dodge Dart is beyond me, but Chrysler managed to do it. Lots of complaints on these cars.

7. Any General Motors passenger car equipped with a 5.7 diesel engine. I hate diesel cars, I really do. Diesels belong in things like dredges and tanks.

8. Triumph TR7, 1975-77. An interesting-looking car with an engine that is so bad it is not fixable, period. Some people put Buick V-6s in them, and that works well. Models made after 1977 are better, but not much.

9. Fiat 850 Spider. These cars are cute and cheap and OH SO TEMPTING. Buy one now and learn the true meaning of suffering on earth. Some Fiats are better (no, make that less worse) than others. The 850 is the very worst.

10. Honda Civic, 1973-74. Even the best of cars start off on the wrong foot. Honda learned a great deal in a few years, but until they straightened out a few bugs on these early Civics, these little cars were very disappointing. Stay away! ■

The Used Car Book

JOE TROISE: Two things that make this book better than most of its type are 1) the section listing 35 of the worst cars on the market, and 2) the extensive legal/consumer sections, which are quite thorough and up to date.

Let's face it. Buying a used car can be a real pain in the ass. After two or three days of looking, most people become weary enough to buy the next best thing that comes along, more often than not ending up a bit disappointed.

The trick is to get yourself prepared before jumping into the used car market. Try and decide what kind of car you want before you go window shopping. Line up a good mechanic to look the car over for you. Get your finances and insurance in order. Go over in your mind how you'll handle the paperwork for purchase, smog and/or safety requirements in your state, and the proper registration procedure.

In short, focus your thinking by doing just a little homework. This book will tell you just about everything you need to know.

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Phone (800) 424-9393 to find out if and why a particular model or component (tires, battery, etc.) has been involved in a safety recall. A printed copy containing a summary of recall information can be mailed within 24 hours after request. . . . There is also a toll-free Teletyrm number for the hearing impaired (800) 424-9153. A Spanish-speaking operator is available during normal operating hours.

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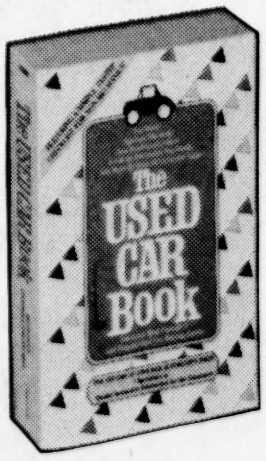
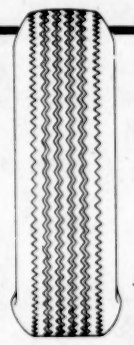
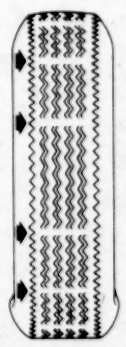
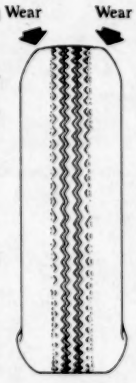
Many people are lured to a car auction by the thought of getting a spectacular deal, but it seldom works out that way. Auctions are usually too risky because inspection opportunities tend to be very limited. With most, you can't road test the vehicle. With others, you're only allowed a very short time to inspect a particular car. With some, you're not even allowed to start the engine! And they're usually sold "As Is." To boot, their prices are often no cheaper than those of average used car dealers.

The Used Car Book
The Editors of *Consumer Automotive Press*
1985; 188 pp.
$6.95
($8.75 postpaid) from:
Consumer
Automotive Press
195 25th Avenue,
Suite 201
San Francisco, CA 94121

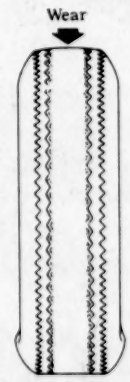



Ordinary (uniform) wear


Wear bars (tire bad)
(replace tire)



Under inflation



Over inflation

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Split the difference. When the salesman finally offers to split the difference after a few rounds of negotiations, you can usually assume that deal is yours and that he's only trying to get as much extra gravy as he can. Don't necessarily split the difference. If you must go up, go up a third or a fourth or less.

◄ **Examples of tire wear.**

AutoWeek

JOE TROISE: Right out of Detroit comes a weekly newspaper that keeps you informed of all the latest cars, trends, products, technologies, statistics and problems in the automotive industry, without the sickening slickness of the usual Big Three auto magazines. In addition, very thorough racing news, a history retrospective, and an interesting classified section round out the paper and keep it from being too dry or predictable.

If you're getting more interested in cars because cars are getting more interesting, this no-nonsense weekly from Motor City is a trunkful of reading for only $23 a year.

•

Walk into almost any Honda dealership and a salesman will nonchalantly ask on which waiting list you would like to be placed. That is the first thing out of his mouth. Forget about performance. A test drive is out of the question. Brass tacks and bottom lines: You give us your money and you take your turn. The products are good enough to sell themselves.

They're so good and in such high demand, for example, that at the CRX's introduction, sticker markups of nearly $3,000 were reported — this on a car with a suggested retail price near $6,000.

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Let me first make a point about the notion that rare and exotic cars are a good investment. . . . Cars are notoriously nonliquid assets in the best of times. . . . One cannot simply sell a "special interest" car on the spur of the moment except at tremendous financial loss.

AutoWeek
George D. Levy, Editor
$23/year
(52 issues) from:
Circulation Manager
AutoWeek
740 Rush Street
Chicago, IL 60611

Handbook of Vehicle Importation

JOE TROISE: Buying a new or used car overseas and bringing it back to the States is nothing new. In fact, the whole sports car craze in America was spawned by U.S. servicemen hauling little MGs over here by the boatload. But with stringent federal emissions and safety regulations in effect for the past 18 years, the importation process can be, in certain cases, a most formidable task.

If you're buying a new automobile overseas that has already been built to U.S. specifications, or a nonconforming older car, there's really no great problem in importing it to the U.S., other than the fact that no great savings is likely to result. But if you buy the European version of an expensive new car, i.e., a "nonfederalized" automobile without required safety and emissions equipment, the price difference between Europe and here is so startling that it makes you realize the folks over at Mercedes-Benz/Porsche/BMW/Audi/Ferrari/Jaguar have been laughing all the way to the bank while cashing in their U.S. revenues.

There is a catch, however. Importing a nonfederalized car into the U.S. is a tricky business. Fortunately, private importers have been making a good living doing it for some years now and are getting more generous with their wealth of experience. These freelance importers, called "gray marketeers," have suffered from a somewhat tarnished image in the States, in no small part due to a relentless campaign against them financed by irate factory-authorized dealers who sell federalized cars on your local street corner for a very tidy profit. The trade association that represents the freelancers, the Automobile Importers Compliance Association, has recently published the ***Handbook of Vehicle Importation*** *as a helpful tool for individual consumers who would like to bring their own special car over here, or who would at least like to know what the proper procedures are.*

The handbook is thorough and complete, and gives you a no-nonsense picture of the task that lies before you. Just reading about all the forms required is exhausting; fortunately, the reward at the end of the rainbow is substantial. If you buy an expensive enough automobile, you can end up pocketing about $10,000 difference between the car you imported and upgraded and the one you might have bought in a U.S. showroom. But don't make a move without this book. Pitfalls abound!

In fact, even if you hire the services of a gray marketeer, this book would be of value in helping you judge if the importer has done his job. A small percentage (some say more than small) of gray marketeers have done some outrageously bad things with people's cars and money.

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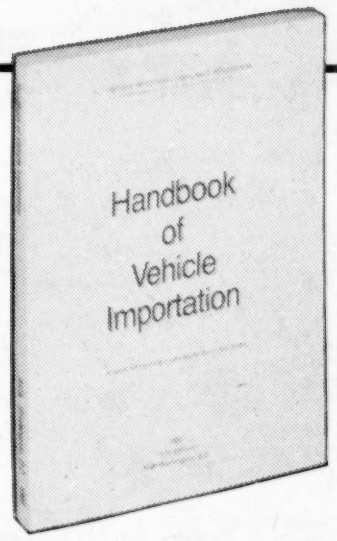
Most vehicle shipments to the U.S. are accomplished by roll-on roll-off ships. This means the vehicle is driven from the dock over a ramp into the cargo bay of the ship and driven out of the bay on to the dock at the U.S. port. Vehicles may also be shipped in crates or containers. Roll-on roll-off shipment across the Atlantic ocean costs about $800. Container shipment may cost as much as $1600. Steamship transport of vehicles across the Atlantic to ports of entry on the East Coast of the U.S. takes about two weeks.

Handbook of Vehicle Importation
Third Edition
Techlaw, Inc.
1985; 144 pp.
$22.95
postpaid from:
Automobile Importers Compliance Association
12011 Lee Jackson Highway, Suite 503
Fairfax, VA 22033



Old Cars Price Guide

JOE TROISE:The definitive guide to pricing "classic" and collectible cars. Don't leave home without it. A simple but sensible grading system is used to help you determine the condition of the car you are trying to evaluate, and the prices quoted are upgraded quarterly, based upon prices realized at national auctions and on-the-street transactions, with popular trends and economic fluctuations factored in.

While no guide book can claim to know the precise and true value of each and every collectible car in the world, you will find this quarterly very much in touch with the real world. This is not a "puff sheet" of inflated prices put together by classic car dealers. Consult the **OPG** *and its ballpark figures diligently, and you will never make the mistake of paying over market value for an old car.*

•

Condition and Pricing Information 1) Excellent: restored to current maximum professional standards of quality in every area; or perfect original with all components operating and appearing as new. 2) Fine: well-restored; or a combination of superior restoration and excellent original; or an extremely well-maintained original showing very minimal wear. 3) Very Good: completely operable original or older restoration showing wear; or amateur restoration; all presentable and serviceable inside and out. Also, combinations of well-done restoration and good operable components; or partially restored car with all parts necessary to complete. 4) Good: a driveable vehicle needing no or only minor work to be functional; or a deteriorated restoration; or a very poor amateur restoration. All components may need restoration to be excellent, but mostly usable as is.
5) Restorable: needs a complete restoration of body, chassis and interior. Not driveable, but is not weathered, wrecked or stripped to the point of being useful only for parts salvage.

Old Cars Price Guide
Dennis Schrimpf, Editor
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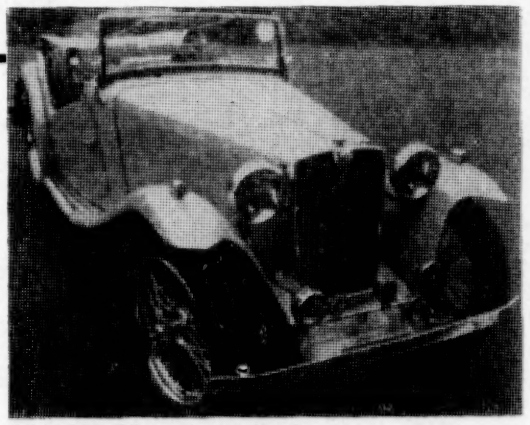
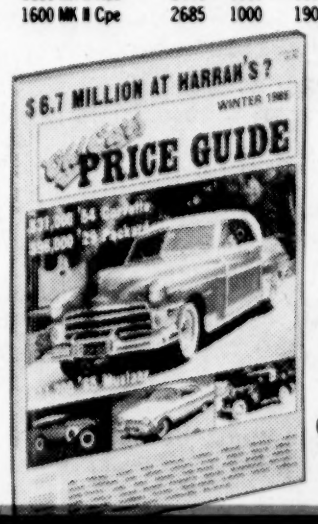
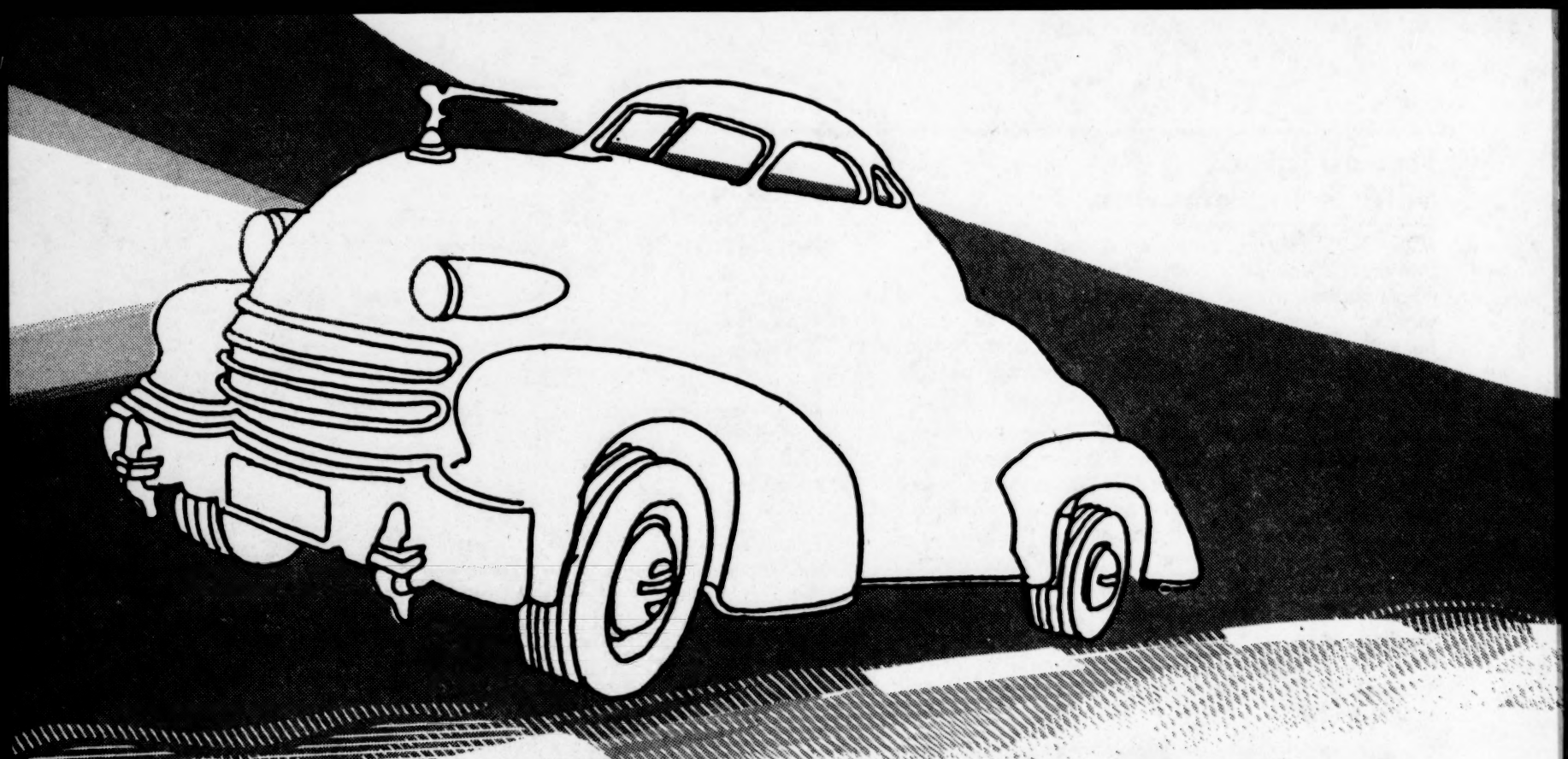
Krause Publications
700 E. State Street
Iola, WI 54990



1949 MG-TC roadster, 4-cyl.

	FP	5	4	3	2	1
1949						
MG-TC, 4-cyl., 94" wb						
Rds		2900	3700	5600	9100	20,000
1962						
MG-Midget, 4-cyl., 80" wb, 50 hp						
Rds	1939	650	800	1200	1700	3000
MG-'A', 4-cyl., 90 hp, 94" wb						
1600 MK II Rds	2449	1000	1800	2800	4200	7000
1600 MK II Cpe	2685	1000	1900	2900	4400	7500





They Don't Make Them Like They Used To (Thank Goodness)

by J. Baldwin **illustrations by Steven Johnson**

SELECTIVE NOSTALGIA seems to be the basis for claims that older cars were "better" than those sold today. Yas, yas, remember the wonderful thick metal they used to use for fenders? We now realize that needlessly heavy metal made a wastefully heavy, fuel-hungry car. It added neither longevity nor safety. If it had, we'd see many more oldies on the road, and occupant crash-protection statistics would show a rise in deaths and injuries as older cars are phased out. But the studies show that the death rate in actual number and in deaths-per-mile-driven are both improving *— despite the increasing number of lightweight cars.*

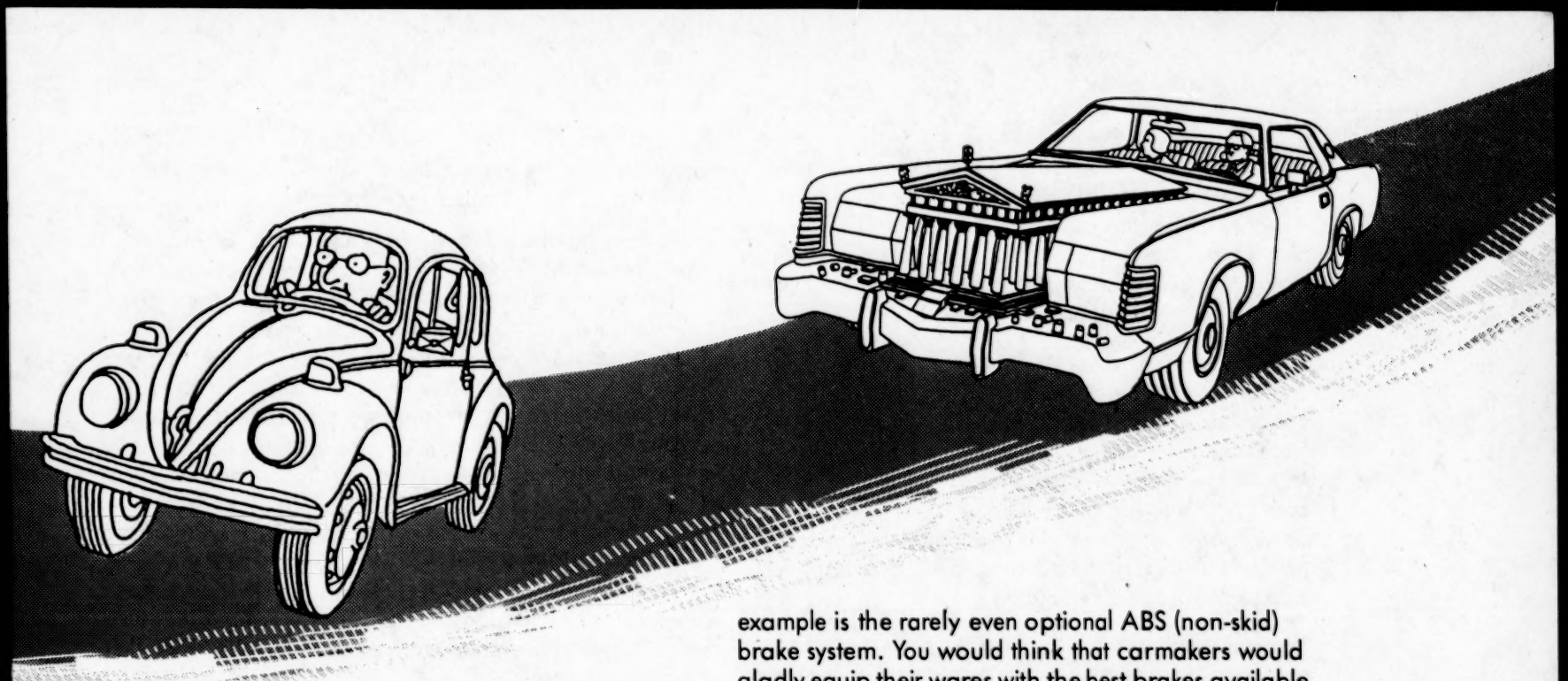
This is partly the result of better roads, but it is also the result of the modern automobile's far-superior brakes, roadholding, handling and general crash-worthiness. If you think your '53 Mercury was so great, I suggest you arrange to drive one or one of its porcine peers. Though the ambience may still be charming, you'll probably be horrified at the clumsy ineptitude on the road. If you try an older model of good repute, such as a 20-year-old Volvo, you may be surprised at how far even lowly cars have advanced since those worthy machines were sold new.

What about longevity? Statistics show that modern cars are driven further than their predecessors before they're junked. 100,000 miles was once considered exceptional before overhaul time. Now it is common to see even pipsqueak foreign cars logging far more than that. But mechanical wear can be compensated for by repair or replacement. *Rust* is the real Grim Reaper because it can't be fixed. Those fondly remembered thick fenders took a while to rust through, but eventually they did. Modern cars are made of thinner, but lighter, high-strength steels that are treated to resist corrosion far longer than previously. Many cars now are even galvanized.

There are several other reasons why we don't see many of the older, supposedly better cars on the road today. One is that "The Road" has changed. Ford made 15 million Model Ts for use at a time when most roads were unpaved. Obviously the Tin Lizzie isn't appropriate anymore. Even in less developed countries where roads are still similar to 1920 U.S. roads, the T is not appropriate. A modern version of it might be, though — one that utilizes today's knowledge of metallurgy, chassis dynamics and safety.

Another reason oldies aren't often seen is that tastes have changed. You could call it "driver education." Rolling living rooms that got 10 miles per gallon have given way to fuel-frugal cars that better obey the driver and hence celebrate, rather than deny, the act of hurtling. Newer models are more competent on country roads, too, in answer to demands of the many Americans now recreating in the boondocks instead of at slick, freeway-served resorts. As design has improved, even economy models that used to be insultingly crude and operationally rude have in most respects become superior to expensive models past.

To be sure, the present sporty, roadable car has an image generated by advertising. So be it. The new cars *are* better in most ways for the average user. It's not just hype. If you object to ad-generated "demand," remember that manufacturers must encourage the Urge to Buy or they'd go out of business. Tooling up for a new model can cost billions. That has to be recouped, of course, but perhaps



more important is that the *system* that brings cars has to be kept healthy so that cars can be afforded. Low sales mean higher unit prices. That's a capitalist fact of life, and it's also one reason cars don't last, say, 20 years. If they did, the market would soon be saturated. Economies of mass production would be lost as demand dropped.

And what if you'd bought a 20-year car in 1972, the year before the "energy crisis?" Would you want to keep that gas pig until 1992? Some conditions change more often than in 20-year increments. You might also take a look at a twenty-year-old car you know. It's probably pretty beat up. Let's face it, cars and all other manufactured (or handmade) artifacts wear out. (*You* wear out.) Things have to be replaced sooner or later. Which brings this discussion to Planned Obsolescence — things deliberately designed to break or wear out "before their time." The bane of the eco-righteous.

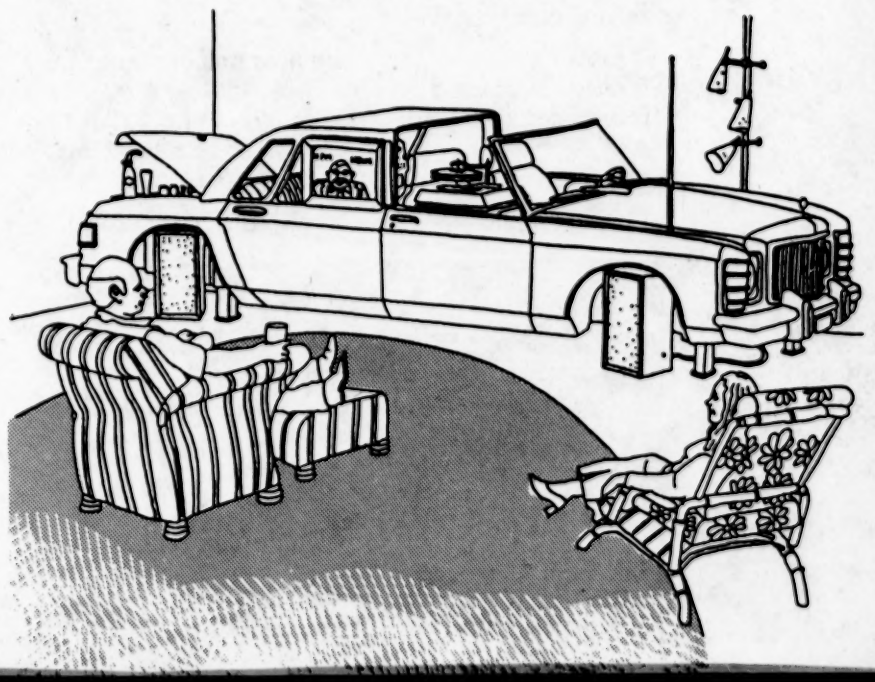
Planned obsolescence can't be reasonably examined until it is separated from "fair wear and tear" — things deteriorating as expected. Many people don't realize that virtually all engineered artifacts have an expected lifespan consciously designed into them. Since anything inevitably wears out, *when* it does so must be decided. In critical cases such as aircraft, that point is chosen after careful analysis, so that parts can confidently and economically be replaced according to a predetermined schedule *before* they fail. With cars, where you can walk home, only parts critical to safety are designed so that failure is unlikely during the expected lifetime of the vehicle. To do otherwise would invite negligent-death lawsuits and public outcry. You hardly ever hear of total steering failure, for instance. But the designed life of noncritical parts is chosen according to other criteria, one of which could be said to be planned obsolescence.

For example, the engine and drive system are, by custom, intended to last at least 100,000 miles. If they don't, the car's reputation would suffer. But the interior and other unguaranteed "soft trim" can be expected to reach tackydom well before that. For many users, that point will be reached at just about the same time the car is paid for and the buyer is most vulnerable to New Car Fever. Clever.

It must also be said that cars are rarely sold at the currently-possible state-of-the-art. An annoying example is the rarely even optional ABS (non-skid) brake system. You would think that carmakers would gladly equip their wares with the best brakes available, or at least offer them as an option. The ideas of optional safety in an industry that kills so many people can certainly be questioned morally, but "safety doesn't sell" has long been considered a truism in the auto industry. In any case, it makes marketing sense to withhold improvements until an excessively frisky competitor forces your hand. Note, however, that when a significant improvement *does* make it to market, earlier models are obsoleted — truly and suddenly.

When the changes and "improvements" are mere styling fads like fins or Opera Lamps, the obsolescence is in the mind of the buyer. In that case, we get what we deserve.

To make things more clear, let's take a look at a vehicle of legendary reputation, the VW Beetle. It is ironic that most machines enjoying legendary status have been, even when new, basically awful. The Beetle was a remarkably poor design: Singularly treacherous handling and a uniquely cramped interior for its size (other cars the same size are 40 percent bigger inside) combined with a valve-eating engine of weak, not particularly economical performance. Where did the good reputation come from? It came from three related sources (plus a little luck in having competition that was even worse): *mechanical simplicity, comprehensibility,* and *fixability*. These salutary characteristics and the consequent mechanical reliability were augmented by a long production run that engendered a lively, knowledgeable subculture of used machines, used and reconditioned parts fitting most models,



and a vast know-how among lay mechanics. The VW also possessed a strong character that made it a favorite of the funky 60s folk and others who eschewed the banal. Today's cars come from corporations run by unimaginative accountants instead of individualistic engineers. New cars are appliances. Boring, too.

New cars are also not particularly amenable to being serviced by ordinary people. The unfortunate complexity is mostly the result of the indisputable necessity of reducing emissions and conserving fuel. It is not generally recognized that the rest of the new cars' mechanism is often *simpler* than older models, and ritualistic maintenance procedures are much less frequent. Yes, turbos add complexity, but many folks apparently think it's worth it.

This is not to say that cars with good performance cannot be built in a way that is easier to maintain than at present. It can certainly be done, and some companies are showing interest in the subject. The motives of companies that don't seem to care about owner maintenance can be understood, if not condoned, by asking yourself if you personally would give away large sums of money so that other people don't have to spend large sums of money. Most people just don't behave that way, and it isn't reasonable to expect a corporation to do differently.

There's another aspect to this: You often hear do-it-yourself mechanics complain that certain parts of new cars can't be repaired, but must be replaced at annoying expense. This is because society has agreed that mechanics deserve a living wage. That wage makes it unreasonable to spend large amounts of expensive time fooling around with finicky repairs. Replacement is faster, and in the long run cheaper for you, despite the heart-stopping parts bill. It's cheaper for the average car owner, not the home mechanic. But the majority rules.

In somewhat the same vein (hee hee), it can legitimately be claimed that modern suspension and steering joints without grease fittings don't last as long as the older designs with fittings. But the longer lifespan of the older parts was *potential* — true only if those fittings got the grease, and on time. Most didn't. For the average owner, the pre-greased parts are cheaper in the long run. For those who care for their own cars, "permanently" lubed parts are irritating and even insolent. It seems that most people prefer to drive it and forget it; the less maintenance the better. It's a delicious twist that makes it possible to assert that the no-maintenance machine is the result of a growing distaste for technology. People like cars that don't make unseemly demands on people, but they pay for the privilege.

One last point: In the wonderful, trouble-free past where things were made of real steel and never wore out, the majority of vehicles (and everything else) were mediocre, just as it is now. The machines we revere in memory were exceptional in their own day, though that was not necessarily recognized at the time. It is possible and even probable that a few of today's models will be recognized as outstanding. Several Japanese models are in that category now.

And remember that whenever you hear someone say, "I've just thought of a better way . . . ," obsolescence is creeping up on someone else's idea of nifty that has run its course. Surely the messier aspects of today's technology *deserve* obsoleting. Many of the objects we have learned to love are energy pigs or have some other obnoxious facet. Perhaps we are maddened by obsolescence because it reminds us of our own mortality. ■

The Complete Buyer's Guide to Kit Cars

JOE TROISE: If you've been planning to do something strange, like turn your VW bug into a minivan or a pickup truck (well, why not?), The Complete Buyer's Guide to Kit Cars will tell you where to buy the appropriate kit — ditto for a fiberglas version of an MGTD, Jaguar XK120, or one of 128 other eclectic fantasies.

The automotive purist invariably rails against these "replicars," but I've always looked upon imitation as the sincerest form of flattery; besides, building your own car must be at least as meritorious as going out and buying one.

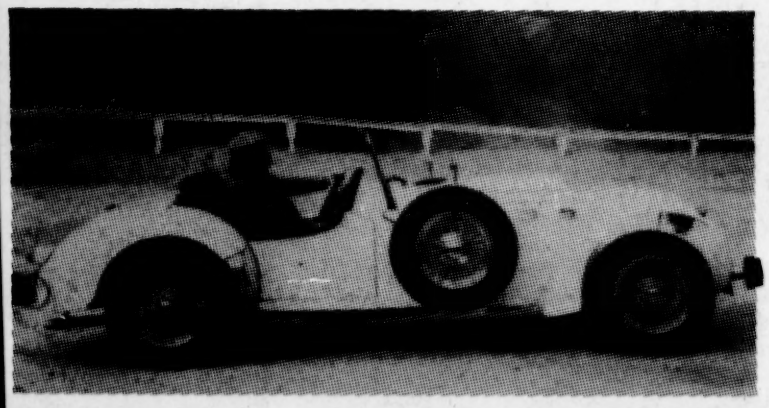
It should be pointed out that prices and evaluations of quality are omitted from this book, making it more of a breezy catalog than a serious reference work. But it does give a very thorough overview of what's currently available and tells you where to write for catalogs.

One last thought: If I were buying a kit car to build myself, I'd arrange to drive a completed car first, so that I could inspect the quality of materials and experience the driving characteristics.

•

Take six wire wheels (two are side-mounted spares), four cycle fenders, and a torpedo-shaped body with a Jag style grille, and add a 302 Ford V8 engine with a Mustang II suspension and gearbox. Sprinkle in a complete set of Smiths gauges and a leather hood strap. What comes out is the Allard J2X2 replica which is now offered in kit form by the same factory that built the original Allard. Lauded by experts as one of the fastest open race cars of the early Fifties, the Allard promises the kind of performance that separates the average from the purist.

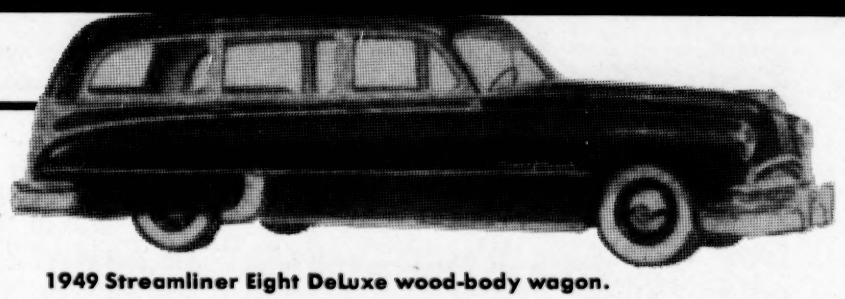
The J2X2 kit is sold complete, right down to the last nut and bolt.



Allard J2X2: Allard Motor Company Ltd., 5181 Bradco Boulevard, Mississaugua, Ontario, Canada L4W 2A6.

The Complete Buyer's Guide to Kit Cars
Phillip B. Hood, Editor
1984; 162 pp.
$9.95
($11 postpaid) from:
Auto Logic Publications, Inc.
P. O. Box 2073
Wilmington, DE 19899
or Whole Earth Access

Complete Book of Collectible Cars, 1930-1980



1949 Streamliner Eight DeLuxe wood-body wagon.

JOE TROISE: With millions of new cars coming out of high-tech, cookie-cutter factories, the idea of owning a "collectible" car from ten, twenty or more years ago becomes increasingly appealing. Driving a 1965 Mustang coupe or a shiny red MGA provides fun, status and plenty of proud-parenting, for about one-third the price of a new car anyone would notice.

Unfortunately, the emotional buyer might fail to realize that "old" doesn't mean "collectible;" and above all, "old" doesn't mean "good" either. Automobile manufacturers have been making horrible mistakes for years. How do you think they got so good at it?

This book will guide you through more than 600 worthy collectibles, both foreign and domestic, giving a photo, production history, specifications, estimated value (too low a figure in most cases) and a quick rundown of pros and cons. You also see a projection of yearly estimated appreciation in value. There's no other collector car publication quite like it.

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Pontiac Streamliner wood-body wagon, 1949

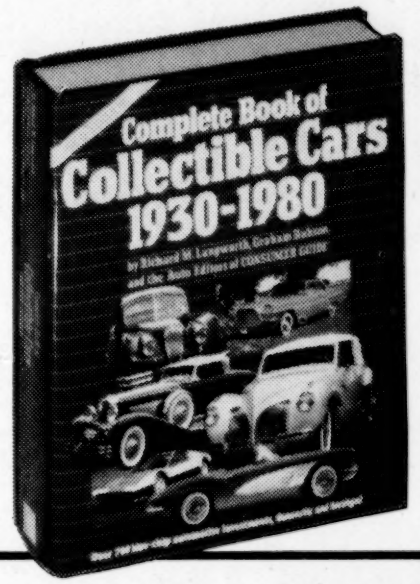
Production: 1000 (est.). *History:* Last of the wood-bodied Pontiac cargo haulers. Offered as an alternative to a new all-steel wagon this year, though there was little difference in price. Both six- and eight-cylinder versions were available. A standard-trim eight-passenger model was offered, and there was a six-passenger equivalent with DeLuxe trim only.

For: Well ahead of contemporary all-steel wagons in value; fine carpentry; last of the breed.

Against: Wood care costly, time-consuming; pricey; same old engines.

. . .

Prices/projection: Restorable, $750-1500; good, $2500-4500; excellent, $4000-6000. 5-year projection: +35%.



Complete Book of Collectible Cars
(1930 — 1980)
Richard M. Langworth and Graham Robson
1985; 416 pp.
$19.95
($22.45 postpaid) from:
Publications International
3841 West Oakton Street
Skokie, IL 60076

How to Restore Your Collector Car

JOE TROISE: Turning a shabby old car into a thing of beauty can be one of life's most satisfying experiences.

Here's an excellent guidebook for the serious restorer. If you'd like to do a first-rate job of bringing a special automobile back from the grave, Mr. Brownell's book will show you, with ample text and photos, the right way to do things. His instructions include how to pick a likely candidate for restoration (some cars just aren't worth the bother) and how to best organize your shop for the substantial project you have chosen to undertake. In fact, the entire book is arranged "chronologically" to take you from the first step (finding the old car of your dreams) to the last (the final beautification process).

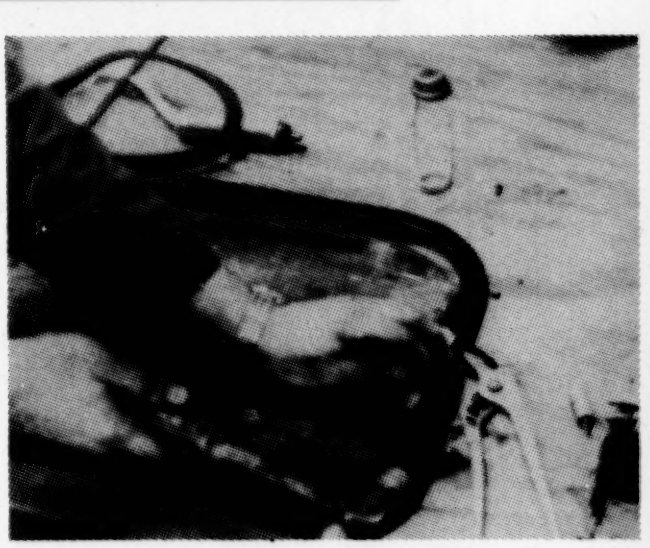
I've seen plenty of poorly "restored" cars, and it's a pleasure to pick up a book that encourages craftsmanship and patience, the two essential qualities for any labor of love. Highly recommended, and interesting reading, too.

•

The advocates of sandblasting would lead you to believe that this is the ultimate way to remove paint and rust. However, I think it should be pointed out that sandblasting tends to peen over deep pits and crevices which eventually will continue to corrode and bleed through the paint. If sandblasting is utilized to achieve a smoother finish on metal parts, I would still recommend chemical rust removal prior to the blasting.

•

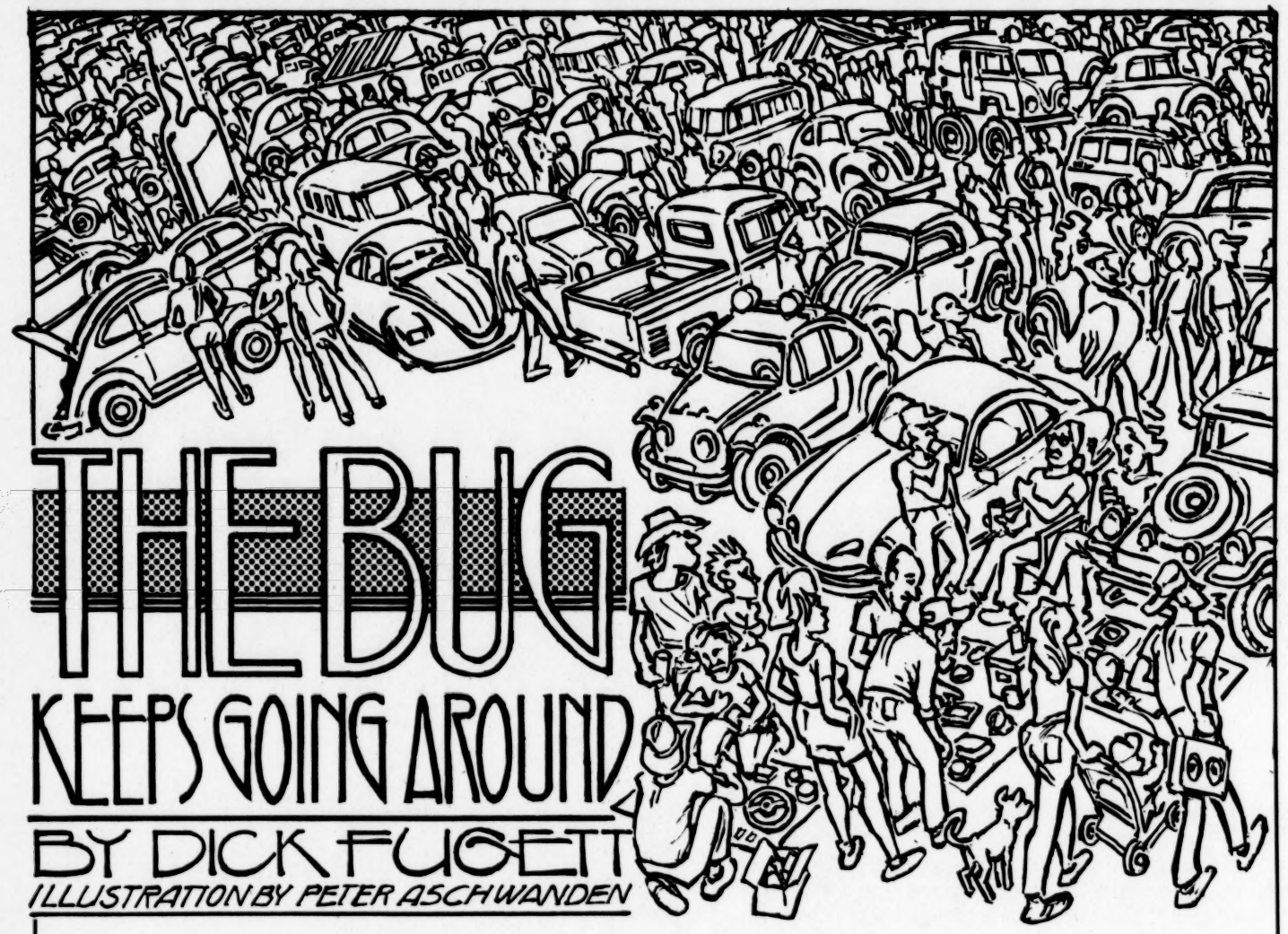
Imron is a Du Pont product. The folks with the good chemistry call it the paint with the "Wet Look That Lasts." We've all seen the gloss a film of water gives to even, chalky, dull paint — Imron always looks just washed. This glossy sheen is just one of the paint's qualities. Toughness is the other. To illustrate Imron's resilience, Du Pont sprayed the paint on a sheet of aluminum foil, crumpled the foil in a ball, then smoothed it out again.



How do you replace the windshield glass in a 1936 Chevy pickup? You start by reading a vintage Chevy manual for instructions on how to take the windshield frame apart.

The paint coating stayed bonded to the foil. (Try that trick sometime with nitrocellulose lacquer.) Bryan Allen coated the *Gossamer Albatross*, a feather-light pedal plane, with Imron and from its looks the paint may have been all that held the craft's gauze-like structure together.

How to Restore Your Collector Car
Tom Brownell
1984; 320 pp.
$20.70 from:
Hemmings Bookshelf
Box 76
Bennington, VT 05201
or Whole Earth Access



THE BUG KEEPS GOING AROUND

BY DICK FUGETT

ILLUSTRATION BY PETER ASCHWANDEN

IF YOU CAN REMEMBER the days when Volkswagens were so rare that their drivers waved to each other on the highway from the sheer joy of meeting another eccentric, then you were one of the first to appreciate the VW's unique value. It wasn't long before people were buying the odd little cars by the millions and the bug became synonymous with an emerging post-Detroit consciousness.

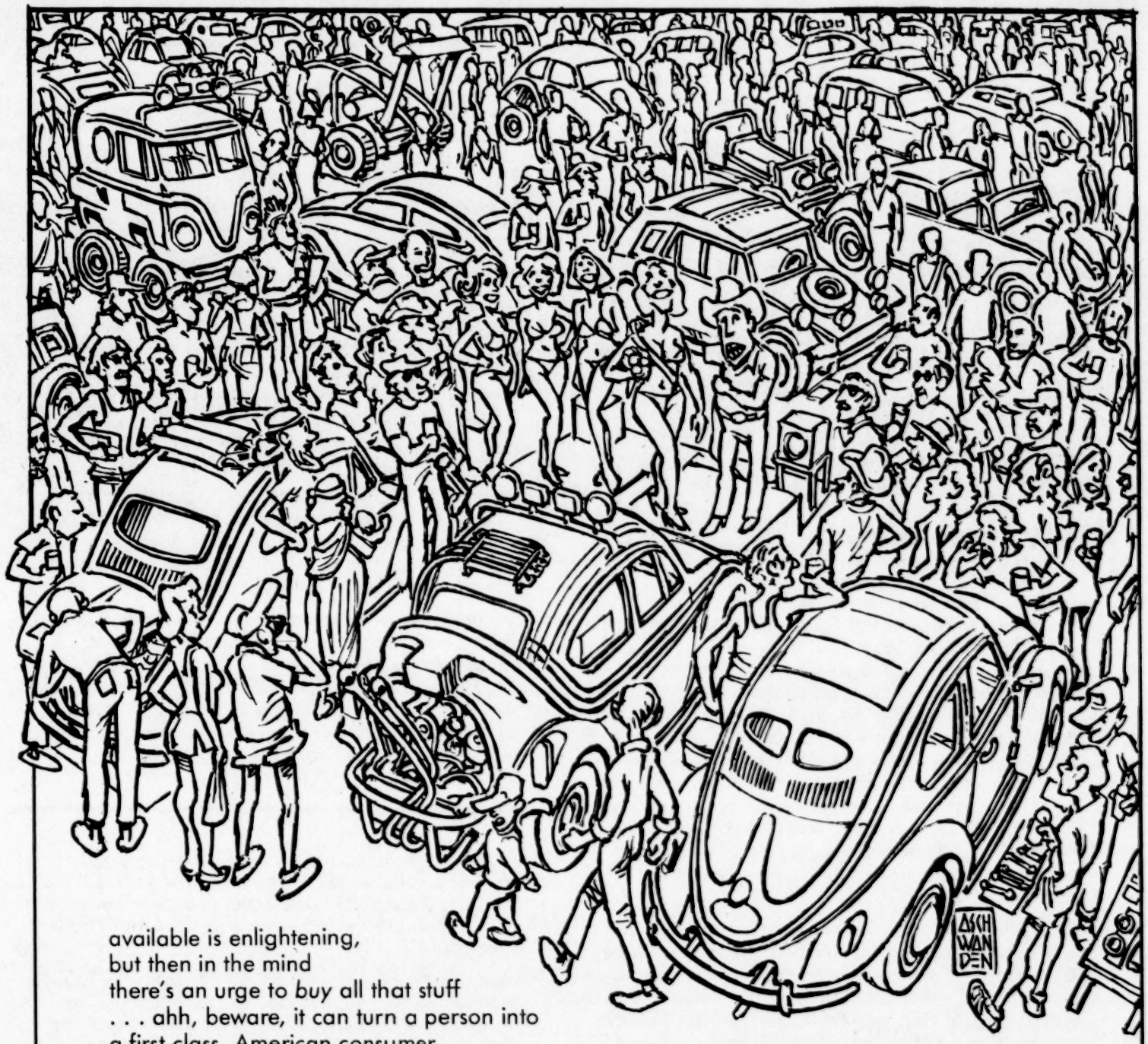
But the limits of the air-cooled engine were arriving, along with the Japanese invasion, and the trusty Beetle was relegated to used-car status. The Volkswagen flourished in its next role as unofficial symbol of the '60s counterculture. Hordes of hippies, yippies and miscellaneous dropouts moved across the nation's highways in the economical and dependable machines, as precision German engineering kept functioning and speedometers began to register their second time around.

Now the same ageless machine has become the vehicle of choice for yet another subculture. This time it's an '80s spinoff of traditional American CarWorship, based predictably in Southern California, the Vatican City of CarWorship.

The new role began a decade or so back, when dune buggies and Baja racers began to separate from mainstream car culture, along with VW dragsters and customs. As the number of aficionados increased, so did their demand for specialized parts and accessories, which in turn created a group of small, specialized manufacturers and suppliers. As a result far more equipment/goodies are available today than a decade ago when the factory in Wolfsburg stopped cranking out air-cooled Vee Dubs.

Of the publications solely for VW fans, my favorite is *Dune Buggies and Hot VWs*. Besides coverage of races and the latest custom trends, they have do-it-yourself articles, valuable but sometimes frustratingly brief in detail. Most enjoyable are the vintage topics, which range from tracing the development of a particular model to wonderful tales of some hardcore collector chasing around the globe in search of original factory esoterica, be it safari bus windows or canvas covers for pickups. The mag has a hangloose attitude and the neo-gonzo writing style is great when it works. With a little writing discipline, the operation could do wonders.

The other half of the magazine is all ads. Hotdam, those guys are pulling in the ad revenue! If VWs are really close to your heart, then here's where gadget lust appears — thumbing through those pages of ads. Learning the scope of what's become



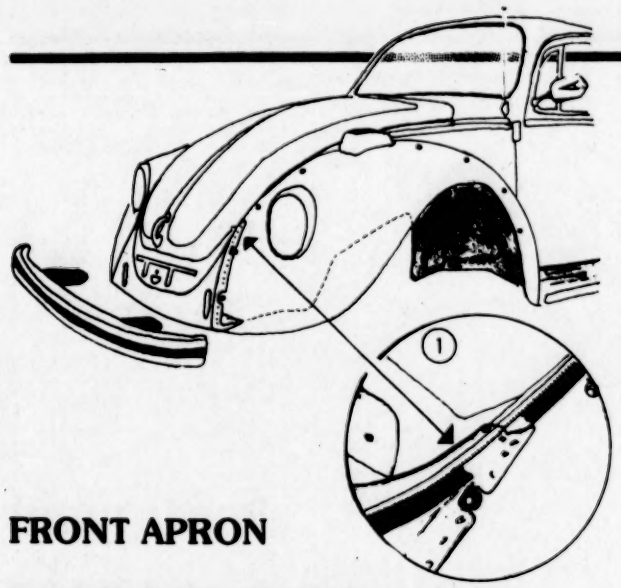
available is enlightening,
but then in the mind
there's an urge to *buy* all that stuff
. . . ahh, beware, it can turn a person into
a first-class, American consumer.

Today's VW fans have gatherings as did yesterday's, but instead of Love-Ins, Be-Ins and anti-war marches, the current crew favors Bug-Ins, Bug-Outs and Bug-O-Ramas. These events combine car shows, drag races and flea markets. Threatening squads of police, covered by the sheriff's helicopter, no longer menace participants, alcohol has superseded weed as the main drug, and social consciousness has been replaced by the Show Queen, probably a leggy blond in a bikini who was chosen by popular applause/group lust. There's a vague similarity to a cattle auction, but since I'm trying to be less judgemental these days, I'll relax and just recall the good used speedometer I picked up at the flea market for five bucks.

After reading the journals and taking in the events, you'll pick up the feel of the new constituency. Times have changed and people reflect it, but the trusty old VW retains its intrinsic appeal. For as long as any of us are alive, there'll be air-cooled VWs in some form, on some highway, working and earning their keep. The passage of time, combined with superior engineering, has produced a classic design as well as an appreciative audience.

Speaking of appreciation, there's another VW trend happening — they keep going up in value. That standard bug that sold for $400 ten years ago brings $1500 today, if it's clean. The increase began with the gas crunch and intensified as basic new car prices passed $10,000, hauling used cars up too.

But beyond the utilitarian aspects, there's something new, for VW desirability is now enhanced by collector appeal and approaching rarity. The humble VW has surpassed mere transportation to become an investment opportunity! Consider stocking your backyard with oval-window bugs, barndoor buses and any convert or Ghia. These models are bringing high prices already and the boom is just starting. Should you live outside the SoCal auto-worship scene in an area where prices haven't yet taken off, consider a VW investment. They're as tax-free as municipal bonds and a damsite more fun. ►



FRONT APRON

With front fenders and the front bumper removed, the front apron is easily replaced.

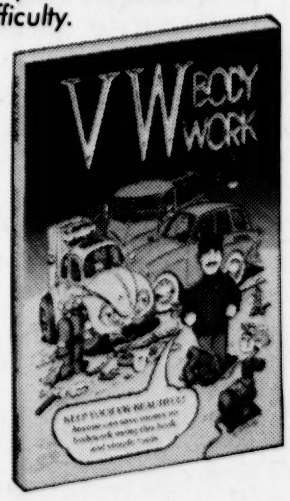
VW Body Work

R. FUGETT: So old Hermann the German has serious body problems? Besides the bashed fender and crunched hood there's the diseased floor under the battery that's ungodly near to dropping out in the street. You're considering selling your old pal? No, don't unload a true friend! Replacement body parts are available and there are two routes to salvation. If you're lazy and rich, then buy the parts and farm out the work to a body shop. But if you enjoy new challenges and can tolerate frustration, then why not learn basic body work? As with any new endeavor, fear of the unknown and lack of experience may veto the idea, but for those who can rise above self-imposed impediments, adventure waits. Why not try a new level of auto support by learning how to work on your own body?

Unlike the multitude of engine manuals there's one solo volume dealing with VW body work, and it's by Clymer. Now if your recollection of Clymer manuals brings flashbacks of unorganized data interspersed with vague, gray photos, then relax, for this one's different. No doubt inspired by the extraordinary success of Volkswagendom's most basic reference and all-time bestseller, ***How to Keep Your Volkswagen Alive****, the Clymer crew has produced an easy reading, well-illustrated manual that will take you as far as you want to go. Replacing fenders and bumpers and hanging doors are shown to be manageable exercises, and if you're still enthused, then the hammering and welding projects are also explained. For an easy bonus there's basic painting, an operation less demanding and mysterious than most think. With $50 worth of paint, a rented/borrowed gun and compressor, and a weekend of elbow grease, sandpaper and masking tape, you can produce not only a brilliant machine but also that long-term satisfaction based on the rewards of personal effort and the mastering of new skills, previously thought beyond human ability.*

It goes without saying that any VW owner has long ago purchased John Muir's "Idiot Book" (NWEC** p. 406). Any soul lacking it will sink into helpless confusion at the merest hint of mechanical difficulty.*

VW Body Work
Dave Tabler
1978; 116 pp.
$10.95
postpaid from:
Clymer Publications
12860 Muscatine Street
P. O. Box 20
Arleta, CA 91331
or Whole Earth Access



Catalogs

R. FUGETT: So what happens if you decide to revitalize an old bug or bus instead of buying one of those snazzy new, high-tech, black box-infested contemporaries that the yuppies favor? Since dealer prices for parts would force you to put a second mortgage on the home, your project may be based on another aspect of VW culture — the mail order houses. They carry everything from engine basics and body parts to rubber, glass and chrome replacements, and all at prices far below dealer.

The primary reference is the magazine, ***Hot VWs****, whose pages are filled with ads for countless establishments, each offering a catalog. My first taste was with* ***Car Customs'*** *240-page catalog. I started out browsing, but the thing was so juicy I ended up reading it page by page like a good novel. I ordered from them later and can report good service and low prices.*

There's also ***CB Performance****, whose equally fat and absorbing catalog features some innovative items like oil pumps that feed an outside oil cooler directly, eliminating the hassle of pulling and tapping your case. I'm going to give this item a try on my next engine rebuild.*

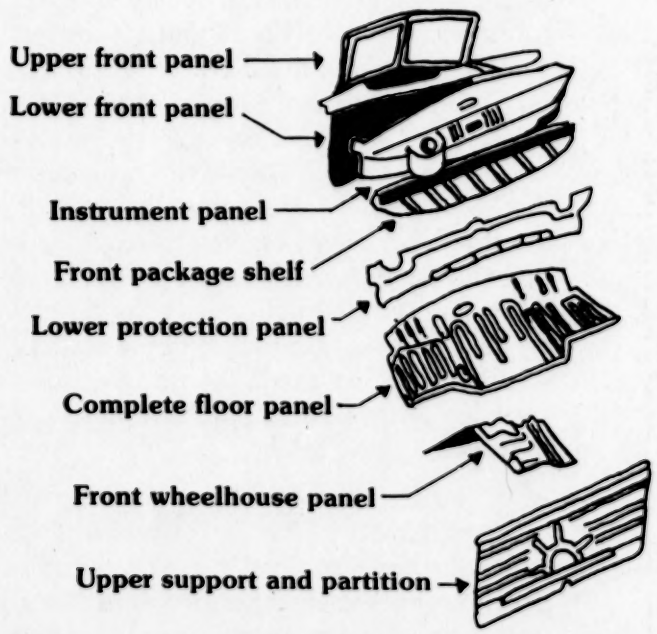
For those of us who never quite lost the desire for high energy, a thumb through these catalogs will produce some tempting possibilities. If you've got a '66 or later case, then for a shade over $300 you could buy a set of dual port heads and manifold, an Engle W100 cam, and an 88mm piston and cylinder kit. That's good for 1689cc and about 70 hp, enough to eat up hills in high gear. ►

•

Usually the front apron of the Beetle is damaged as a result of a collision to the front end. The front bumper can be replaced, the hood panel and front fenders can be repaired, but the front apron must be replaced with a new panel.

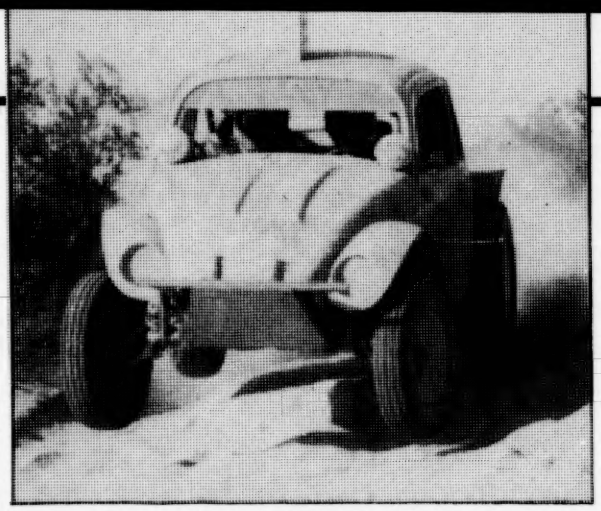
Replacing the front apron on the Beetle is a fairly simple undertaking. It is spot-welded to the side panels and to the spare tire compartment floor. The welds show as slight depressions in the metal where the panel edges meet and overlap.

BODY SECTIONS/FRONT



Panels may be replaced separately or as a complete unit. Body parts are available either way.

Always quote chassis numbers when ordering replacement parts.



With a light, disciplined foot your mileage won't suffer much, but the larger question is whether you really want to get back into the horsepower race again.

But what if your philosophical musings are interrupted because your bug-body is being eaten away by natural elements? If so, forget about that brute force stuff and consider ***Tabco****, back in cheerful, salt-ridden Cleveland. For wagens that have done time on salted highways and are singing the rustout blues, they'll sell you nearly any body part, from rocker panels to jack supports.*

Car Custom
915 W. Foothill Blvd.
Azusa, CA 91702
$5 for Catalog

CB Performance
28813 Farmersville Blvd.
Farmersville, CA 93223
$3 for Catalog

Tabco
30500 Solon
Industrial Pkwy.
Cleveland, OH 44139
$3 for Catalog

Dune Buggies and Hot VWs Magazine
$16.97
(12 issues) from:
Wright Publishing Co., Inc.
P. O. Box 2260
Costa Mesa, CA 92628

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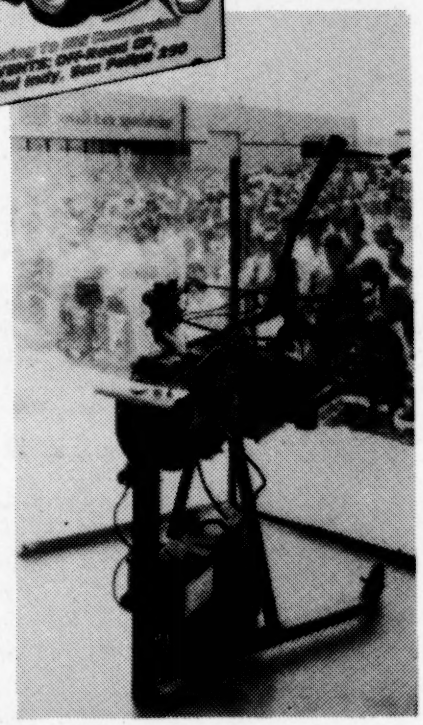
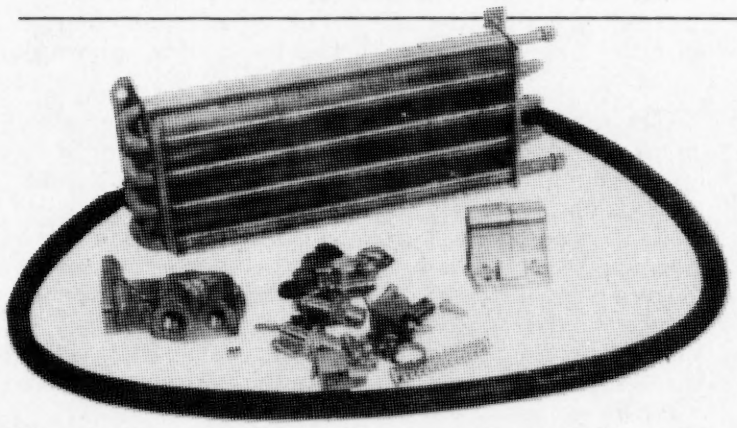
A tradition of the Showdown is always the "Engine Blow Contest," where an air-cooled VW engine is run without any oil, and the spectators can guess at the amount of time it will last, before the engine is started up.



The engine sacrificed in the "Engine Blow Contest," and the protective barrier around it to protect the crowd. ►



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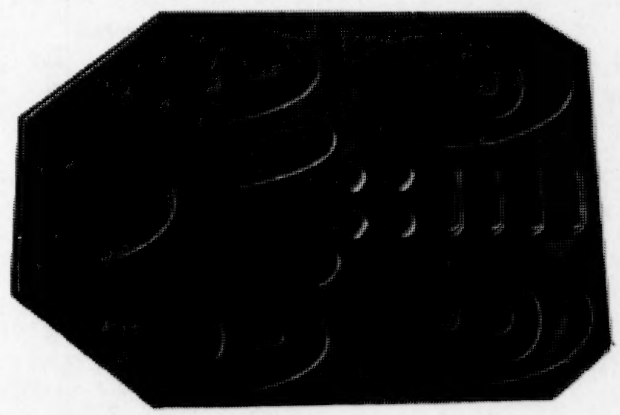
MAXI COOL STANDARD OIL COOLER
Standard slip over oil fittings are used to reduce the overall manufacturing cost. Standard hose fittings provide a safe permanent connection for high pressure oil lines. They are not recommended for use in race cars when repeated removal and reinstallation of the engine is expected. The standard fittings are perfect for use in VW sedans, buses and dune buggies. Each Standard Oil Cooler includes a heat exchanger, high temperature oil hose, oil filter adapter, oil inlet and outlet plate, clamps, fittings, mounting screws and all hardware for installation.



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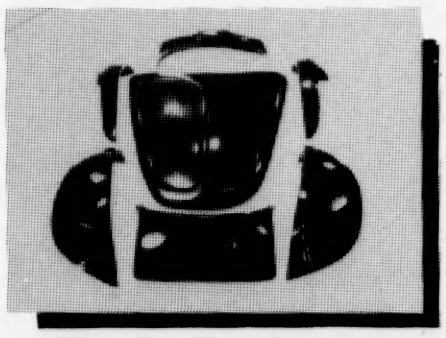
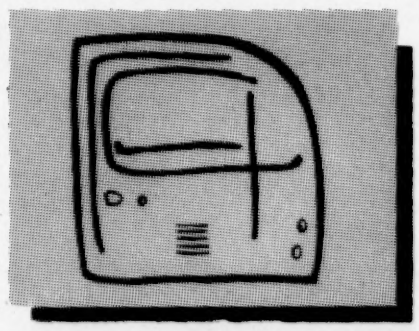
ALL IN ONE GASKET SET
Just cut "em" out when you need them. This is the most popular gasket available today. Includes rubber gaskets to fit door and trunk handles, license lamp, tail lights, and front and rear bumper brackets. You can save lots of bucks with the handy "All In One Gasket Set."

Part No. 5868 All In One Gasket Set, fits VW sedans 1958-68.
Part No. 5865 All In One Gasket Set, fits VW sedans 1969 & later. *—CB Performance*



Bug sedan door and window seals —Car Custom



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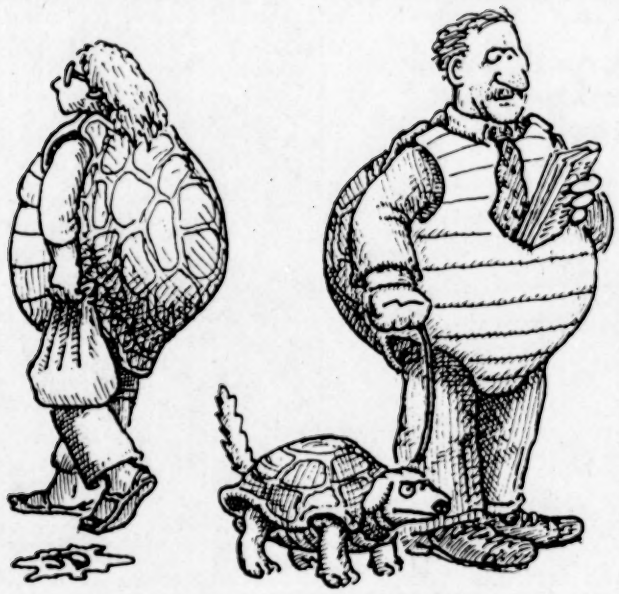
WIDE EYE BAJA KIT
This 7 piece wide eye kit is our most popular Baja kit. The headlights mount into the front fenders. You can use your stock 12 headlights or our sealed Baja lights. The fenders are designed for 5½" wide front and 8" wide rear wheels. Stock rear tail lights will mount on the rear fenders and the rear deck has a raised area for the license plate. Kit includes 4 fenders, front hood, nose and rear deck.

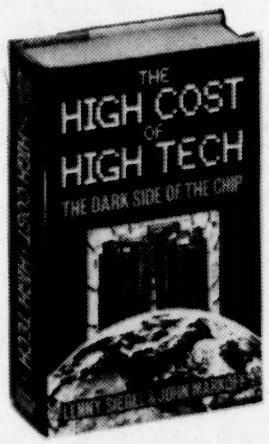


THE ISSUE OF PERSONAL SAFETY WILL NEVER REALLY GET OUR ATTENTION UNTIL IT IS COMBINED WITH FASHION.

The High Cost of High Tech

*ART KLEINER: Two knowledgeable watchdogs of Silicon Valley have gathered all the poisonous implications of computers together into one coherent volume. Remember Jerry Mander's "Six Grave Doubts About Computers" (**WER** #44, p. 10)? This is "Eleven Grave Sets of Facts" — from the high-tech contaminants in groundwater to the abuse of unskilled workers by computer companies, both here and in Asia. I would have preferred a longer book; it glosses over too many details. But it's the only book so far that puts the poisons and the panaceas in context. Its goal — right livelihood with computers — isn't bad either.*

The High Cost of High Tech
Lenny Siegal
and John Markoff
1985; 256 pp.
$16.50
postpaid from:
Harper and Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth Access



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Incredibly, it is even possible for computer spies to copy information directly from a computer's low-level electromagnetic emissions. Unless a computer is tightly shielded, someone with a receiver and a computer for sorting through the signal can reconstruct information from a targeted computer. Since video screens emit electromagnetic signals, it is possible for a nearby observer to reconstruct the information displayed on a video screen, reportedly from as far away as 500 feet, without being detected. For example, one electronic security firm, as part of its sales pitch, drives a truck up to a computer installation, throws a wire over the power lines running into the building, and then shows the astonished employees what is printing out inside their offices.

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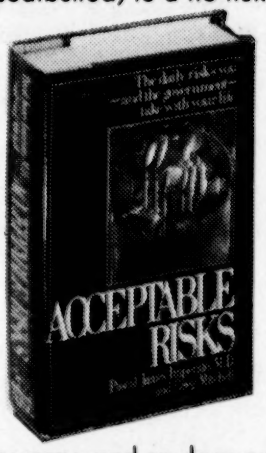
The continuing role of Asian production workers in high-tech industry is an irony of major proportions. Many of the world's most sophisticated industrial products are assembled by the world's lowest-paid industrial workers. Wages in the Philippines, Thailand, and Malaysia average about U.S. 50¢ an hour; in Indonesia they're even lower.

Acceptable Risks

J. BALDWIN: Zero risk isn't an option. That means we either abdicate and take our chances, or we attempt to exercise control over the type and probability of the risks we face. Obviously, useful decisions can't be made if risks are being denied, ignored, covered up, postponed to future generations, or simply not recognized. This book is heavy on dramatic presentations of such currently popular risks as formaldehyde and irradiated food, and it's written in a manner that appeals mostly to those persons who already agree with the authors. But it's also a good overview of some of the more pressing problems of the day, and it makes clear the maddening dichotomies involved, e.g. folks driving, unseatbelted, to a no-nukes rally. Lots to think about.

Acceptable Risks
Pascal James Imperato
and Greg Mitchell
1985; 286 pp.
$15.95
($16.95 postpaid) from:
Viking Press
299 Murray Hill Parkway
East Rutherford,
NJ 07073
or Whole Earth Access



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For each risk the consequences vary, and so does each person's perception of the risk. Yet a high degree of danger, accurately perceived, does not always deter risky behavior. We assemble our personal-risk portfolios in an erratic (and sometimes irrational) way. Our reactions to risks are almost never entirely appropriate. We blithely accept a substantial risk (such as taking a long automobile trip in bad weather) but are often inordinately afraid of long-shot threats (such as being hit by lightning).

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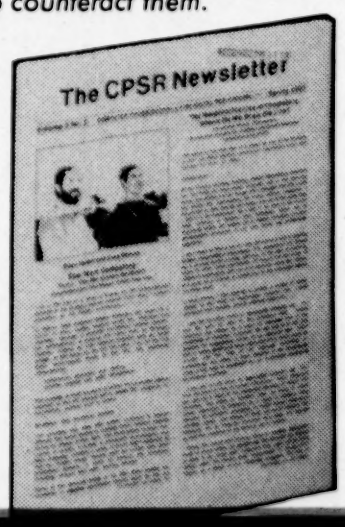
If seat-belt use remains abysmal, calls for the government to take safety decisions out of the hands of the public will undoubtedly increase. Appeals to reason will cease; reliance on technology will increase. Perhaps a new national consensus will grow on the efficacy of the air bag or automatic seat belt. Even conservative columnist George Will, no fan of regulation, has declared that he regrets 'having once argued that government has no business requiring drivers to buy and use inexpensive devices that might save them from self-destruction. There is a pitiless abstractness and disrespect for life in such dogmatic respect for the right of consenting adults to behave in ways disastrous to themselves,' he explains, adding that 'too many children passengers are sacrificed on that altar,' and that 'a large part of the bill for the irrationality of individual drivers is paid by society.

'Most important,' concludes Will, 'society desensitizes itself by passively accepting so much carnage.'

The CPSR Newsletter

ART KLEINER: Where computer people meet to talk about the global (i.e., warmaking) implications of the tools they build and how to counteract them.

The CPSR Newsletter
Daniel Ingalls and
Donna Osgood, Editors
$30/year
(4 issues) from:
Computer Professionals
for Social Responsibility
P. O. Box 717
Palo Alto, CA 94301



Normal Accidents

J. BALDWIN: It's your Worst Fears Confirmed: Accidents in complex technologies are inevitable, nonpreventable, and hence can be considered a "normal" part of life, like a little dishonesty. The author, a sociologist, makes a worrisomely good case for this view, though he spoils it a bit with easily sniped-at gaffes (e.g. he asserts oxygen is highly flammable) and the book is rife with typographical errors. When you're talking tough stuff, as this author is, you risk losing your credibility with careless editing. Nonetheless, his points are clear and will be especially unnerving to those concerned with the operation of nearby nukes. What to do? Mr. Perrow advises that certain technologies cannot be made safe, and that this is a logically acceptable reason for forbidding their further development. Garrett Hardin might say that the threat to the commons is too high, for instance, for nukes to be permitted. On the other hand, some very dangerous technologies have been managed quite well — commercial aircraft, for example. Despite a crash from time to time ("normal"), air travellers are statistically much safer than they are in many less esoteric activities. A provocative contrast is made here between the air transport industry and Marine transport, where statistics show a loss of more than one ship a day on average. All most interesting, and easily read too. Sweet dreams!

[Suggested by John Benecki]

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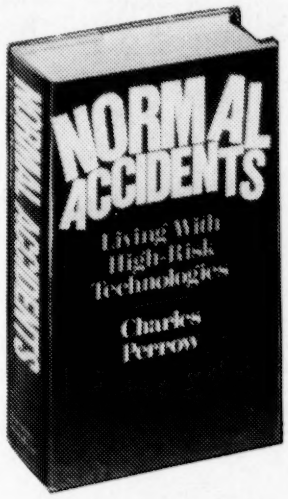
You stay home from work or school because you have an important job interview downtown this morning that you have finally negotiated. Your friend or spouse has already left when you make breakfast, but unfortunately he or she has left the glass coffeepot on the stove with the light on. The coffee has boiled dry and the glass pot has cracked. Coffee is an addiction for you, so you rummage about in the closet until you find an old drip coffeemaker. Then you wait for the water to boil, watching the clock, and after a quick cup dash out the door. When you get to your car you find that in your haste you have left your car keys (and the apartment keys) in the apartment. That's okay, because there is a spare apartment key hidden in the hallway for just such emergencies. (This is a safety device, a *redundancy*, incidentally.) But then you remember that you gave a friend the key the other night because he had some books to pick up, and planning ahead, you knew you would not be home when he came. (That finishes that *redundant pathway*, as engineers call it).

Well, it is getting late, but there is always the neighbor's car. The neighbor is a nice old gent who drives his car about once a month and keeps it in good condition. You knock on the door, your tale ready. But he tells you that it just so happened that the generator went out last week and the man is coming this afternoon to pick it up and fix it. Another "backup" system has failed you, this time through no connection with your behavior at all (*uncoupled* or independent events, in this case, since the key and the generator are rarely connected). Well, there is always the bus. But not always. The nice old gent has been listening to the radio and tells you the threatened lock-out of the drivers by the bus company has indeed occurred. The drivers refuse to drive what they claim are unsafe buses, and incidentally want more money as well. (A safety system has foiled you, of all things.) You call a cab from your neighbor's apartment, but none can be had because of the bus strike. (These two events, the bus strike and the lack of cabs, are tightly connected, dependent events, or *tightly coupled* events, as we shall call them, since one triggers the other.)

You call the interviewer's secretary and say, "It's just too crazy to try to explain, but all sorts of things happened this morning and I can't make the interview with Mrs. Thompson. Can we reschedule it?" And you say to yourself, next week I am going to line up two cars and a



Normal Accidents
(Living With
High-Risk
Technologies)
Charles Perrow
1984; 386 pp.
$10.95
($12.45 postpaid) from:
Basic Books, Inc.,
Publishers
Attn: Sales Dept.
10 East 53rd Street
New York, NY 10022
or Whole Earth Access

cab and make the morning coffee myself. The secretary answers, "Sure," but says to himself, "This person is obviously unreliable; now this after pushing for weeks for an interview with Thompson." He makes a note to that effect on the record and searches for the most inconvenient time imaginable for next week, one that Mrs. Thompson might have to cancel.

Now I would like you to answer a brief questionnaire about this event. Which was the primary cause of this "accident" or foul-up?

1. Human error (such as leaving the heat on under the coffee, or forgetting the keys in the rush)?
   Yes _____ No _____ Unsure _____
2. Mechanical failure (the generator on the neighbor's car)?
   Yes _____ No _____ Unsure _____
3. The environment (bus strike and taxi overload)?
   Yes _____ No _____ Unsure _____
4. Design of the system (in which you can lock yourself out of the apartment rather than having to use a door key to set the lock; a lack of emergency capacity in the taxi fleet)?
   Yes _____ No _____ Unsure _____
5. Procedures used (such as warming up coffee in a glass pot; allowing only normal time to get out on this morning)?
   Yes _____ No _____ Unsure _____

If you answered "not sure" or "no" to all of the above, I am with you. If you answered "yes" to the first, human error, you are taking a stand on multiple failure accidents that resembles that of the President's Commission to Investigate the Accident at Three Mile Island. The Commission blamed everyone, but primarily the operators. The builders of the equipment, Babcock and Wilcox, blamed *only* the operators. If you answered "yes" to the fourth, design of the system, you can join the experts of the Essex Corporation, who did a study for the Nuclear Regulatory Commission of the control room.

The best answer is not "all of the above" or any one of the choices, but rather "none of the above." The bus strike would not affect you if you had your car key or the neighbor's car. The neighbor's generator failure would be of little consequence if taxis were available. If it were not an important appointment, the absence of cars, buses, and taxis would not matter. On any other morning the broken coffee pot would have been an annoyance (an *incident*, we call it), but would not have added to your anxiety and caused you to dash out without your keys.

Though the failures were trivial in themselves, and each one had a backup system, or redundant path to tread if the main one were blocked, the failure became serious when they interacted. It is the *interaction* of the multiple failures that explains the accident.

TELEPHONE TAPE MACHINES
ARE IMPROVING SMALL BUSINESS AND OUR MANNERS

by Michael Phillips

TALKING TO PEOPLE BY PHONE isn't drastically different from talking to them in person. But because the phone has allowed people to talk while separated by large distances, it has had enormous effects on our society. For one thing it has allowed corporations to grow much larger than they could have without it. The largest company in fact became Ma Bell.

The phone has permitted the growth of large financial centers across the U.S., in San Francisco, Chicago, Los Angeles and Dallas when only New York had such prominence before. It has changed the way many smaller businesses operate. Before the phone, lawyers, jewelers, clothiers, and wholesalers usually had their own streets where they were close to the others in their businesses. Today, because of the telephone, they are scattered all around the city.

We won't have to wait long to notice the effect of telephone tape recorders. They represent only a slight modification of the overall telephone system, but they are having a very immediate and noticeable effect.

Since the mid 1970s, when the first reliable machines reached the market, 16 million telephone tape recorders have been sold versus 5 million personal computers.

The greatest impact has been on small businesses — allowing one person to run a business effectively. For example, the business owner can go on an errand and the customer can still leave an order or other information. In part because of this there are now 7.5 million self-employed workers, an increase of nearly 2 million since 1975.

The tape machine is also creating a new etiquette. In fact, better manners. It is a positive social force. We are almost at the stage where people who don't have a message machine are considered rude.

There are three ways phone tapes improve manners.

First, it promotes rudimentary courtesy. The phone tape machine requires that you identify yourself. You may have to give your own phone number, when you can be called back, and a brief statement about the reason you're calling. I don't call strangers back unless they meet those minimum rules of courtesy, and I seldom call back strangers who don't mention the name of the person who referred them to me.

Second, the tape allows its owners to set some calling rules. One friend says on the tape that he will call back between 4 and 6. Another says she doesn't take calls after 9.

Third, blatant rudeness seems to disappear on tapes. When have you heard an insult delivered over the tape machine? Rarely. Much less often than occurs in person. Two reasons: (1) To the person leaving the message the tape feels like a more permanent record than a person-to-person conversation, and (2) it feels stupid getting angry at a machine.

Most of all, manners are improving because the tape introduces a new device for dealing with uncomfortable social situations.

Good managers have always known that if at all possible you only deliver bad news in person, never by letter, telegram or memo. That no longer seems to be the case. Now managers can deliver bad news by a tape machine when a direct encounter is not immediately feasible.

Such exchanges have the advantage that the recipient hears a human voice with all the intonations of concern yet has the privacy to react emotionally to the news.

A message telling an author his "article has been rejected" can convey soft sympathy and finality. A message to call back urgently because a car has hit Mary-Mary and she is in the emergency room, allows the listener to deal with the shock privately before calling back for the details. A whole new social medium seems to be developing.

In visiting hundreds of small businesses over the past few years, I have seen two distinct trends. One is to make the message on the machine as brief as possible. "This is Tandy, I'll be out for a few minutes." This works for the bulk of the phone calls, since maybe 90 percent are with peers who call each other daily and don't want to listen to a message. The second is the use of multiple phone lines and multiple machines. The reason for the multiple lines is to separate the people you are working with from the occasional caller. The occasional callers are then handled by the machine with a clear distinct message about the business that tells them precisely what information to leave (such as area codes for businesses that get a lot of long distance calls) and other phone numbers to call for specific services ("Call this number and leave your address if you are ordering a single book").

Advice on buying a machine: Buy two! This piece of capital is the most rewarding kind you can buy. More valuable than anything else a small business can buy. Never be without an extra, in case one breaks.

Get the key features on the market today: Remote call-in to get messages and to change a message; variable time for the machine message and unlimited-voice activated for the respondents' message. There are other features on the horizon, such as multiple prerecorded messages and special caller codes to get specialized messages, but these aren't vital. ■

The Small Business Legal Problem Solver

BERNARD KAMAROFF: One hundred and seventy-three questions and answers on just about every aspect of business law: Contracts, loan agreements, employment rules, leases, bank accounts, advertising, insurance, taxes, collections, bankruptcy, liability, franchises, and quite a bit more.

What are the advantages of incorporating in Delaware? Should we buy the building in our own names or have it owned by our corporation? We own a fast food operation and plan on opening two additional units; do you suggest using the same corporation? What are the advantages and disadvantages of a factoring arrangement? What specific questions are illegal to ask on an employment application? What essential points should we consider for a sales agent agreement? Can we legally restrict our distributors from carrying a competitor's line? Are we legally obligated to continue buying supplies from our franchisor?

Every business owner probably has a slew of legal questions. I'd guess that regardless of the business you are in several of your questions are answered, or at least partially answered, in this book. The answers are brief, concise and easy to understand.

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Q. Can you define the employees who can earn less than minimum wage? We operate a plant with 600 employees in diverse occupations and, due to low employment in our area, we have a surplus of workers willing to work for less.

A. Federal law has its exemptions, but each state has its own requirements, which may be more stringent. Therefore, you also should consider your state law. Federal law exempts employees who fit any of these requirements.

1. Employees of very small businesses: This applies only to employees of retail or service businesses grossing less than $362,500.

2. Employees working on "tips": If the employee earns more than $30 a month in tips, up to 40 percent of the tips can be applied to the minimum wage requirement.

3. Apprentices: Such employees must be enrolled in a training program for skilled employment. Check the specific regulations available from the Department of Labor to determine whether your training program complies.

4. Full-time students: Such employees must be employed in retail or service businesses, and you must obtain prior approval of the Department of Labor.

5. Learners: This provision excepts learners in office and clerical jobs. Other learners can be paid less, with prior approval of the Department of Labor.

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Q. One of our employees invented a new process for manufacturing one of the items produced by our shop. The employee claims the right to the invention; our position is that because the invention was developed during her employ with us, we should have all rights to it. What claim do we have?

A. If the employee made the invention during the course of her employment, your company would have a nonexclusive license to use the invention. You would not have to pay the employee royalties on its use, but the employee can license others to use it and can procure the patent in her own name.

On the other hand, if the employee had as part of her job description the duty to develop new processes, then the invention would belong to the company, even if the employee developed the process during nonworking hours or "off-the-premises."

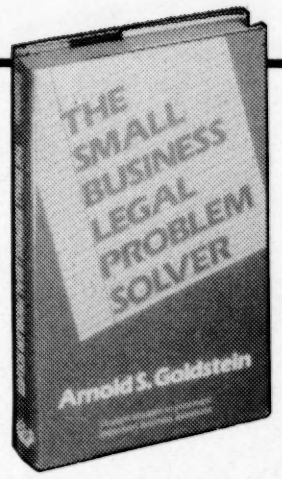
•

Q. Our company ordered $2,000 worth of fabric by telephone, and two days later we called and cancelled. The supplier told us that he would sue us for breach of contract. Are we liable?

A. Oral contracts generally are not enforceable where the contract is to buy or sell personal property with a claimed contract price in excess of $500. Here, however, are some exceptions:

If you had accepted all or even part of the order, then evidence of the contract obviously exists, and you are liable.

If you acknowledge the existence of the contract in writing (even if it's to notify the seller you won't honor the oral contract) it may be sufficient evidence of the contract to make it enforceable.



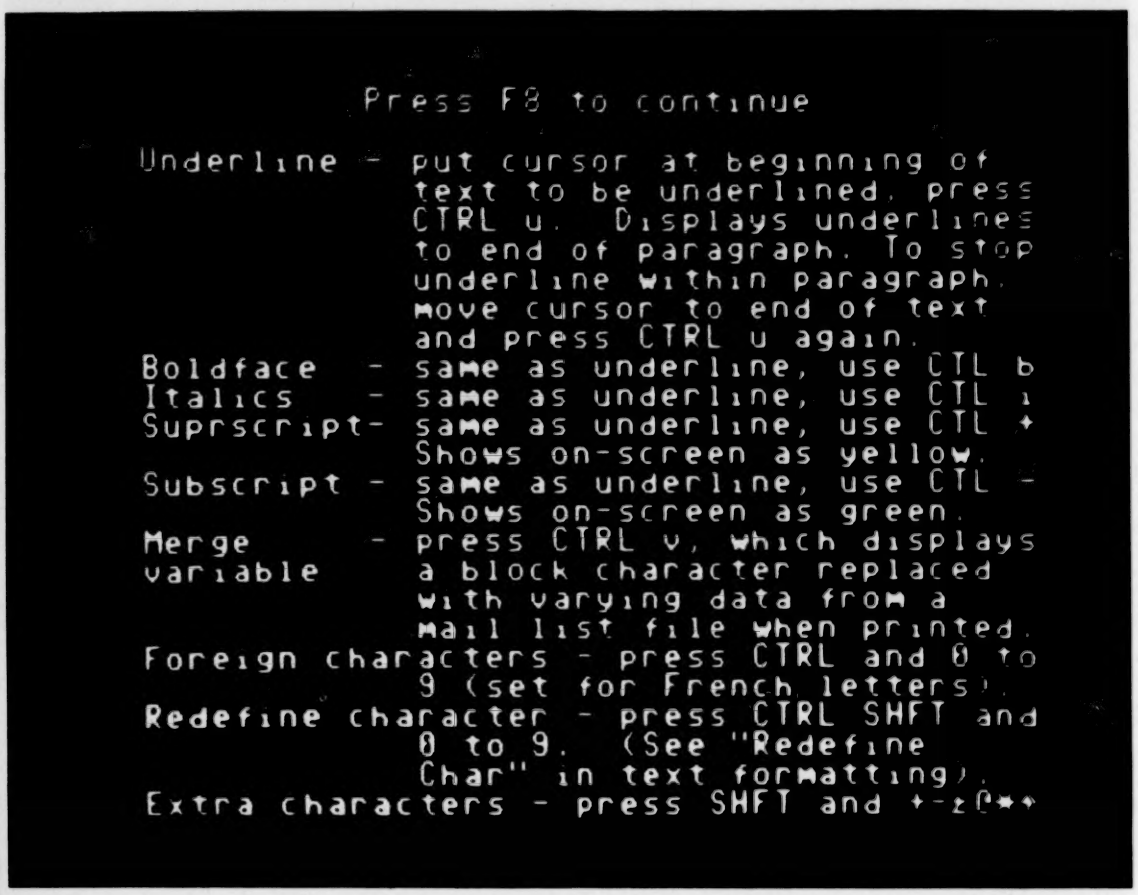
The Small Business Legal Problem Solver
Arnold S. Goldstein
1983; 270 pp.
$3.95
(postpaid) from:
Inc./CBI Publications
286 Congress Street
Boston, MA 02210
or Whole Earth Access

LITTLE BLACK BOOK

Cygnet Technologies. Copy-protected: $49.95. Not copy-protected: $69.95. IBM PC. Cygnet Technologies, 1296 Lawrence Station Road, Sunnyvale, CA 94089. 800/621-4292 (in California: 800/331-9113).

WOODY LISWOOD: LITTLE BLACK BOOK has become one of my most frequently used computer programs. It stores all my names, addresses and phone numbers on a disk. It can then print these out in small format which I can cut out, staple together, and keep in my shirt pocket. Instant address book. LITTLE BLACK BOOK even comes with a little black book cover.

In the computer mode, the program allows automatic dialing with a modem, so if I am working on my computer and need to make a call, I summon the dialer program and LITTLE BLACK BOOK will dial my friend on a telenetwork. I sit down once a month and take out my old book, enter my new numbers to the program, and print out the now up-to-date book. A great idea implemented in a nifty way.



On the 80-column screen, you get on-screen formatting — meaning that what you see on the screen is formatted exactly the way it will be when you print it on paper. This is almost unheard of in a 40-column computer. And if 80 columns aren't enough for you, the screen will scroll sideways an infinite number of columns.

PAPERBACK WRITER

David Foster, Digital Solutions, Inc.. Copy-protected. $39. Commodore 64. Protecto Enterprises, 22292 N. Pepper Road, Barrington, IL 60010. 312/382-5244.

DONALD MAXWELL: About six months ago, I was assigned by the editor of a computer magazine to do an overview of word processors for the Commodore 64. At the time, we figured there'd be maybe eight or nine of them. But by my July deadline, I had tried out 32 of the things — most of them embarrassingly awkward or confusing or complicated or useless or just plain UGLY. A few, however, turned out to be very respectable, and one, PAPERBACK WRITER, is a real joy. In fact, I liked it so much that I wrote the article with it, and now it's the only one I use at all (except for preparing columns of data, for which I use PAPERCLIP). It's a genuine 80-column word processor that does just about everything. I like it better than the dozen or so word processors I've used on the Apples and the IBM PC, too.

How to Write a Book Proposal

LLOYD KAHN: You've got a great idea for a book or you've already written it. What next? How do you find a publisher or an agent?

You do a proposal. Not a college essay, or your own hazy version of what you think might interest the publisher, but a proposal with a specific content and parameters that will get your idea, your abilities and your background across quickly and clearly.

This is the "What They Don't Teach You at Harvard Business School" kind of book from a literary agent who obviously knows the pitfalls of dealing with authors too vague and publishers too rushed. It's well worth $10 to learn how to communicate your idea to those who might bring it into reality. "The challenge is to get the right proposal to the right editor at the right publisher at the right time."

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To prove that a writer can sustain plot and characterization for at least 200 pages, or 50,000 words, and to create maximum impact on an editor, first novels usually have to be finished. Nonfiction writers are luckier, however. Since most nonfiction books rely on an accumulation of information rather than dramatic force to be effective, and since writers usually need money to research and write their books, most nonfiction books are sold on the basis of proposals.

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Although it can be shorter or longer, a proposal generally ranges from 35 to 70 pages. It has two primary functions:

1. It's a selling tool.

The fundamental goal of a proposal is to use as few words as possible to generate as much enthusiasm as possible for your book from your idea, your style, your project's commercial potential, your ability to promote it, or ideally all four.

2. It's a writing tool.

Regard it as a long letter, memo, or report in which you are outlining for an editor and yourself what you are planning to do and why.

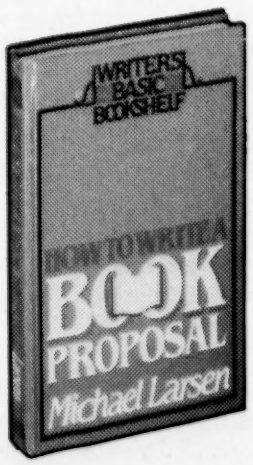
•

Michael Korda, the editor in chief at Simon & Schuster and a best-selling author himself, has a formula for a book's success: "If you can't describe a book in one or two pithy sentences that would make you or my mother want to read it, then of course you can't sell it."

San Francisco Bay Area sales rep Stan Gould once remarked in *Publishers Weekly*: "When we make our calls, we have on the average maybe 14 seconds per book (!) . . . what we need is an expeditious, concise, sales-oriented handle that says a lot about it in as few words as possible."

Broadway producer David Belasco's warning to playwrights also applies to you: "If you can't write your idea on the back of my calling card, you don't have a clear idea." The selling handle for your book will be a one-line statement of your goal for the book.

How to Write a Book Proposal
Michael Larson
1985; 113 pp.
$9.95
($11.95 postpaid) from:
Writer's Digest Books
9933 Alliance Road
Cincinnati, OH 45242
or Whole Earth Access



WEBSTER's NEWWORLD SPELLING CHECKER

Simon and Schuster. Copy-protected. $59.95 (IBM PC/PCjr/XT); $49.95 (Apple II/IIe/IIc). Simon and Schuster, Attn: Order Dept., 1230 Avenue of the Americas, New York, NY 10020; 800/223-2348.

WOODY LISWOOD: This is a 114,000-word dictionary. It works phonetically as well as logically. When a word found in a word processing text is not contained in the dictionary, NEWWORLD offers a number of suggested spellings. You can also add correctly spelled words to your own dictionary. A feature I found rather nice is to preview certain words before editing, words I know the program is going to find questionable, so I could mark the correct spelling before the run starts and save lots of time. And NEWWORLD catches double words like "the the" or "and and," something none of the other spelling checkers I worked with can do. It also finds words that run together and will suggest, as the first alternative spelling, how to split them up. Saves lots of retyping. The documentation also contains a "Writer's Guide to Punctuation" and "Manuscript Preparation." The only thing this little goodie doesn't do is automatically reformat the paragraph after a correction.

PAGEMAKER

Version 1.0. Copy-protected. $495. Macintosh. External disk drive required; hard disk recommended. Aldus Corporation, 616 First Avenue, Suite 400, Seattle, WA 98104; 206/467-8165.

JAY KINNEY: "The Portable Universe," Steven Levy's article on page 42, was designed, laid out, typeset, and pasted up using PAGEMAKER, the 512K Macintosh, and the Apple LaserWriter. Touted as one of the products that will usher in a new era of "desktop publishing," PAGEMAKER transfers to the Macintosh many tasks that were previously either done by hand or with equipment costing three or four times as much. The result is almost up to snuff, though the print resolution of the LaserWriter makes type come out looking Xeroxed rather than photo-typeset.

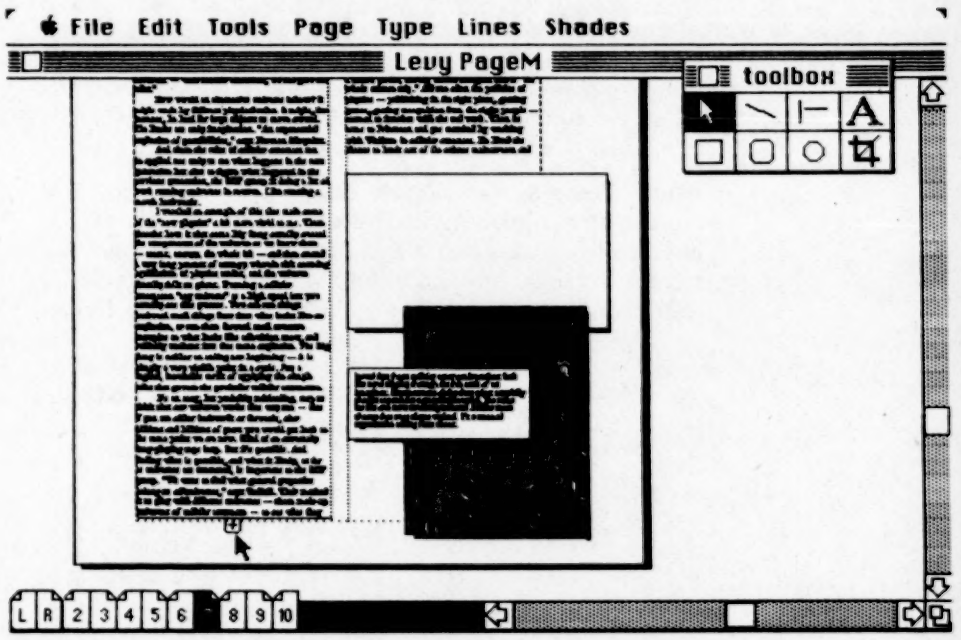
For this article, author Levy telecommunicated his text by modem through the EIES Network where it was downloaded and edited by ***WER****'s editorial crew on a Compaq personal computer. The copy was then telecommunicated through the WELL to the office Mac, where Kathleen O'Neill "poured" it into PAGEMAKER and designed the layouts. Certain photos for the piece were digitized with Thunderscan and dropped into place in the on-screen layouts. However, when the pages were laser-printed and proofed some errors were apparent: here and there, previously unnoticed double spaces had crept in between words when the copy was downloaded.*

Changing hundreds of gaps in the already-designed file proved impractical: PAGEMAKER has no global search feature and has been known to crash if too many changes are enacted without frequent, time-consuming "saves."

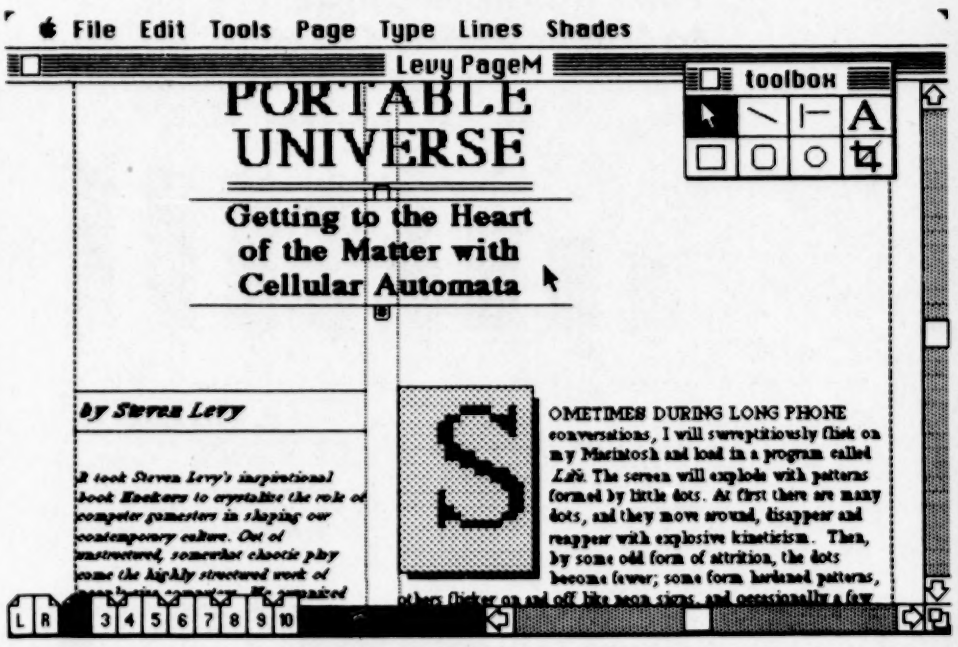
While Kathleen went on to other design tasks for the issue, I came in as 9th-inning pinch hitter, reworking the article text in MACWRITE, repouring it into PAGEMAKER, and recreating Kathleen's layouts. This laborious process pointed up one of PAGEMAKER's major weaknesses: copy needs to be nearly perfect before it is "poured in."

As a layout and typesetting aid, PAGEMAKER is the most full-featured program presently available for the Mac; it is also the most expensive. Its ability to quickly place line-rules, draw boxes, move type and graphics earned it high marks. But its tendency to freeze up at inopportune times and the tedious methods required if one wants to change type style or size in multi-paged articles can make one reach for the aspirin. PAGEMAKER may be on the cutting edge but its blade can still use a good deal more sharpening.

If you publish a newsletter and have more time than money to spare, PAGEMAKER may be just what you ordered. And if you crave the control over all aspects of design that it allows, you'll be happier still. On the other hand, if your time is at a premium and you'd rather farm out the detail work, PAGEMAKER's painstaking thoroughness probably dumps more responsibility in your lap than you want. Take this one for a good test drive before you plunk down $495.



PAGEMAKER allows views of page layouts at several sizes: 50% (as above), 70%, actual size, 200%, and a "fit in window" size. Type can be continued from column to column and page to page by clicking the mouse on the tab at the foot of a column of type.



What you see on the Macintosh screen is not always what is finally printed out. Shown here are column guides which help shape the columns of type but do not print themselves. The headline and body copy look somewhat crude onscreen, but are later tightened up by the POSTSCRIPT language embedded in the LaserWriter printer.

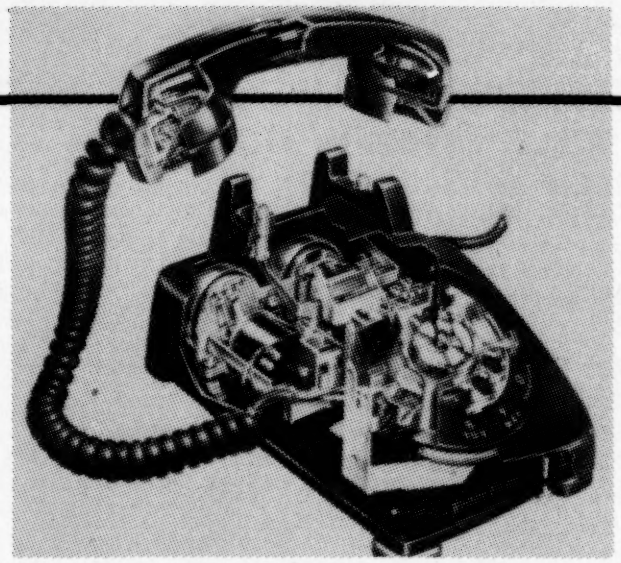
101 Money-Saving Secrets Your Phone Company Won't Tell You

Which Phone System Should I Buy?

ART KLEINER: My favorite guide through the tangled knot of business phone services is Harry Newton's ***101 Secrets****. Written in the same irascible style as* ***Teleconnect Magazine*** *(CQ #41, p. 113) which Newton publishes,* ***101 Secrets*** *is mostly about cutting your phone expenses without losing any service. Some of the methods are Machiavellian — deliberately mess up the quality of your phone lines, for instance, so your employees spend less time on the phone. But there are equally devious tips for bargaining with that heretofore implacable institution — the local phone company.*

At one point Newton laments that telephones are boring — so people get taken because they don't want to bother sludging through the details. I agree. This book won't make the subject fascinating, but at least it makes it tolerable — an immense achievement.

Which Phone System Should I Buy? *answers exactly that question for a growing business with growing phone needs. In plain English it describes dozens of phone system features, from automatic redialing to toll call restrictions, so you can figure out ahead of time whether a feature will please or punish your staffers. There are chapters on maintenance and repair and on Centrex (keep your phone system within the local phone company's central office). We were ignorant shoppers at Whole Earth when we bought a phone system three years ago. This book, used judiciously, probably would have saved us the cost of the (multithousand-dollar) consultant we hired and would have gotten us a more suitable system because we would have known what to ask for.*



Probably the oldest continuously made phone, the "500" single line rotary (dial) telephone set. This is the classic electro-mechanical telephone. It will work fine behind most PBXs. It will last a zillion years. The wallphone version is called the 554.

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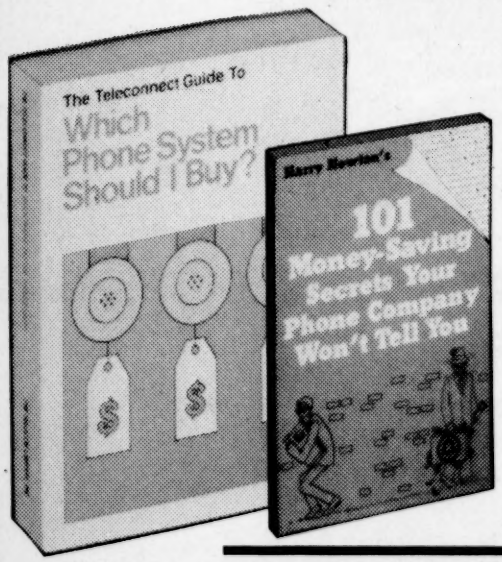
It's a good idea to outlaw third party calls altogether in your business. It's a good idea because (1) it opens you to fraud and (2) third party billed calls are very expensive. To outlaw third party calls, write a memo to all your employees saying you won't accept or pay for any third party calls — period. Send a copy of your memo to your local Bell or independent phone company. They will probably tell you they will not honor your letter, since, under state-approved tariffs you are bound to pay.

Ignore Bell's words and simply remove each month's third party calls from your bill. Return the amended bill with a check for the reduced amount plus a copy of your original memorandum. This is a pain. Eventually, they'll get the message and remove the calls from your bill themselves. This education will take time. Sorry.

—101 Money-Saving Secrets

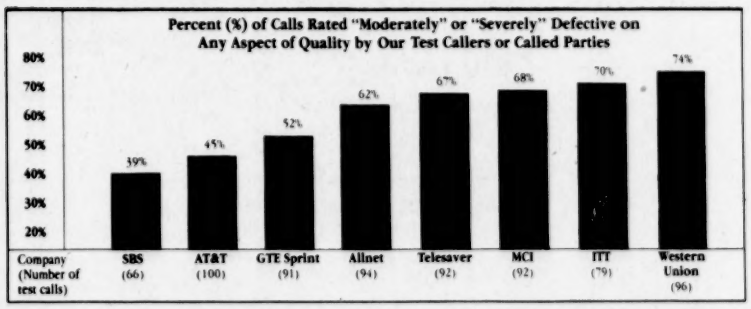


101 Money-Saving Secrets Your Phone Company Won't Tell You
Harry Newton, 1983; 94 pp.
$7.95 ($9.95 postpaid)

Which Phone System Should I Buy?
Fifth edition; 1985
$39.95 ($42.95 postpaid)

Both from:
Telecom Library, Inc.
12 West 21st Street
New York, NY 10010
or Whole Earth Access

The Complete Guide to Lower Phone Costs



ART KLEINER: Most of us will be victims — not consumers — of phone service in the next year or so. We won't understand our choices because all the options have never been compared in one place. Until now. This is a masterful job of analyzing phone service for ordinary folks. It compares, for instance, not just the long-distance rates that different carriers charge, but the varying sound quality that you'll find on different lines.

The unavoidable telephone jargon and numerous comparison charts make this book at least an evening's work to plow through, but you'll easily make back the cover price in your first month of using it.

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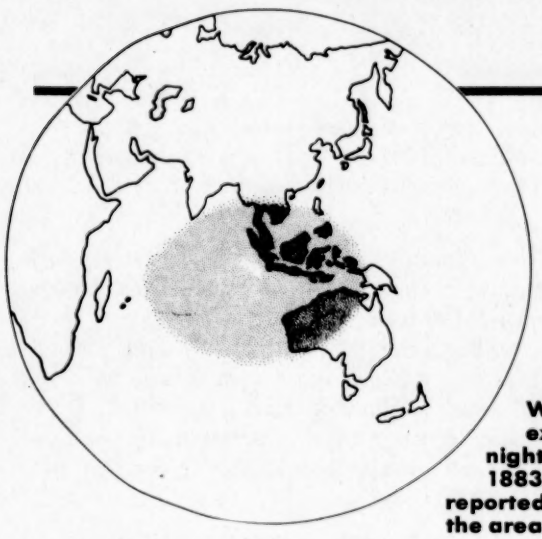
Q. Which is the best company if I expect to place a lot of calls when traveling?

A. GTE Sprint is a good bet. It charges the same for calls originating away from your home city as for calls you make from your home phone. Also, GTE Sprint allows you to originate calls from a relatively large number of locations (over 350 cities). If you find a lower-cost company for calls from your home phone but that company does not have a good travel feature, you may want to sign up for GTE Sprint as a backup service to be used when traveling — so long as you'll call enough each month to meet GTE Sprint's $5 minimum usage requirement.

The Complete Guide to Lower Phone Costs
1985; 71 pp.
$6.95
($7.95 postpaid) from:
Consumer's Checkbook
806 15th Street NW
Suite 925
Washington, DC 20005
or Whole Earth Access



When Krakatoa exploded on the night of August 26, 1883, the sound was reported heard over the area shaded here.

The Tuning of the World

CHARLIE BREMER: One of the most remarkable books on sound around. The author charts soundscape, the geography and history of our sonic environment. No type of noise, roar, clatter, hiss, twang, vibration, or audible rhythm escapes his notice. For instance, he discovered European towns hum at harmonies of G sharp (50 hertz power supply), while America drones at B natural (60 hertz). He divides our surroundings into dominant tonal patterns, mapping out the evolution of sound on Earth. Other topics discussed: Sacred sounds, the concert hall as a substitute for outdoor life, the intent of Muzak, sounds of water creaures, sound imperialism, ceremonies about silence, and taboo sounds. A marvelous, awakening book.

•

Electrical equipment will often produce resonant harmonics and in a quiet city at night a whole series of steady pitches may be heard from street lighting, signs or generators. When we were studying the soundscape of the Swedish village of Skruv in 1975, we encountered a large number of these and plotted their profiles and pitches on a map. We were surprised to find that together they produced a G-sharp major triad, which the F-sharp whistles of passing trains turned into a dominant seventh chord. As we moved about the streets on quiet evenings, the town played melodies.

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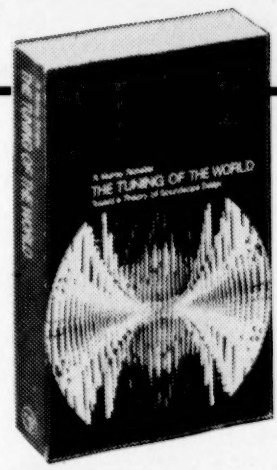
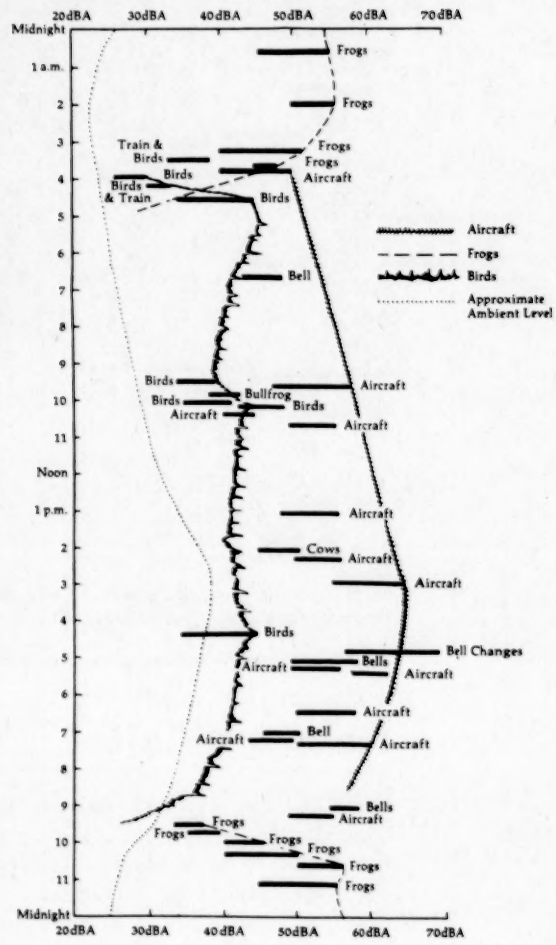
The rhythms of all poetry and recited literature bear a relationship to breathing patterns. When the sentence is long and natural, a relaxed breathing style is expected;



The Tuning of the World
(Toward a Theory of Soundscape Design)
R. Murray Schafer
1980; 301 pp.
$12.95
postpaid from:
University of Pennsylvania Press
3933 Walnut Street
Philadelphia, PA 19104
or Whole Earth Access



This chart shows log notes of sound events taken during a 24-hour period in the countryside in British Columbia.

when irregular or jumpy, an erratic breath pattern is suggested. Compare the jabbing style of twentieth-century verse with the more relaxed lines of that which preceded it. *Something* has happened between Pope and Pound, and that something is very likely the accumulation of syncopations and offbeats in the soundscape. And the perceptible jitteriness in Pound's verse begins after he has moved from rural life in America to the big city of London. Just as human conversational style is abbreviated by the telephone bell, contemporary verse bears the marks of having dodged the acoustic shrapnel of modern life. Car horns punctuate modern verse, not bubbling brooks.

Experimental Musical Instruments

KEVIN KELLY: The following step after a successful revolution is to build new kinds of tools to overthrow the next success. After the acceptance of far-out music, here come radically insurgent instruments — harps 50 feet long, steel cellos, drums that float on water, and devices that amplify the natural micro-sounds of a fly heartbeat or a seedling sprouting. All are discussed in this fascinating newsletter with great emphasis on trying out newly invented apparati that make musical sounds.

[Suggested by Roger Hoffman]

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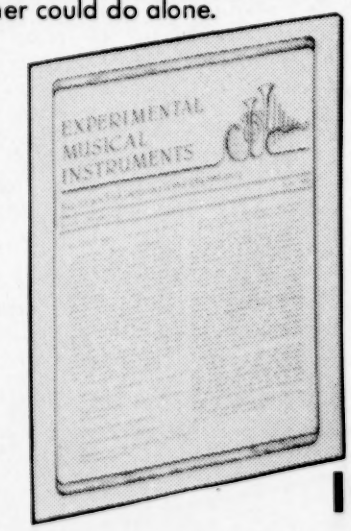
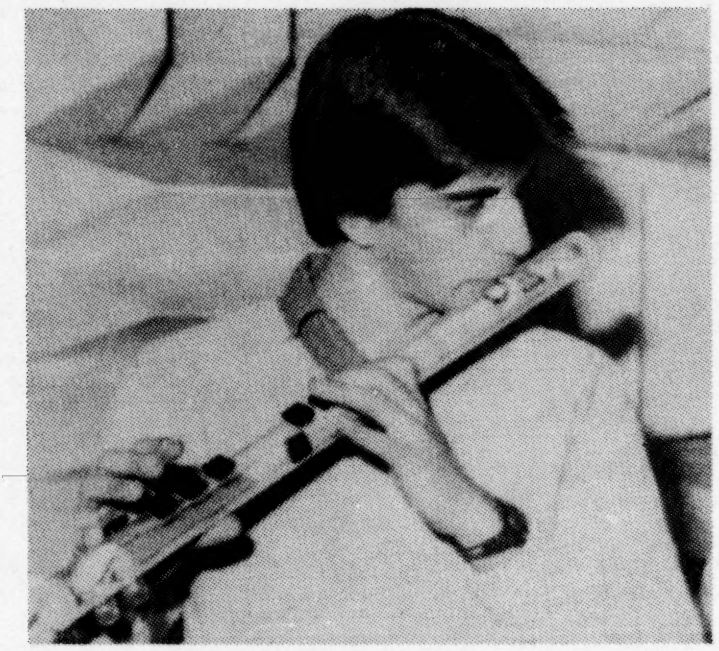
Members of the Logos Foundation from Belgium talk briefly of a metal voice resonator they have built. The body of the instrument is a large metal can with an opening cut in the side. A heavy metal coil spring, like that used in garage door openers, is welded to the bottom inside. When one vocalizes into the can, the can and spring together resonate strongly with the voice, but in their own peculiar timbre, producing a response far greater than what either could do alone.

Ellen Fullman plays the Long String Instrument.

Experimental Musical Instruments
Bart Hopkin, Editor
$20/year
(6 issues) from:
Experimental Musical Instruments
P. O. Box 423
Point Reyes Station,
CA 94956



Triple-chamber ocarina made by Sharon Rowell.



M. Borys playing the digital flute developed at the University of Manitoba, Winnipeg, Canada.

Jamming on Home Computers

No More Violins

DAVID JULIAN GRAY: There is an unbroken tradition of sophisticated music, the music of high levels of intellection, that seems to have been fueled by an almost tyrannical quest for "newness." J.S. Bach's sons chided their father for his stodgy adherence to old-fashioned ways even as he composed music which is now universally recognized as among the greatest expressions of human consciousness. While old Johann was respected by insiders and musicians, his son Carl Philipp Emanuel was hailed by the educated middle class and his contemporaries for creating a bold new style, the "classical" style exploited by Hayden and Mozart. To whom do we listen today?

This tradition of bold, new music has attained a degree of "newness" so extravagantly new today that the public has ceased to listen. Composers compose for their colleagues and provide them with mini-treatises on compositional theory to aid in their appreciation. The trunk of the tradition of orchestral music (now mostly ossified in grand concert halls) has grown out of the atmosphere, out into deeeeep space. Some of us follow, yet lack a sense of connectedness — that communication "beyond understanding" — a hallmark of universal art. The trunk is gone, but its branches are cross-pollinating and flowering.

The divisions of styles are evaporating. Rock and rollers are joining this arcane elite in the outer reaches of sound, but highly trained musicians are abandoning the obscure for a broader audience appeal. David Del Tredici has written some lovely tonal orchestral works. Jazz is a "classical" tradition unto itself, and many, many younger musicians are looking backward now to expand the ideas of every era in jazz history: there's a virtual "jazz canon."

One of the finest aspects of the new technology is its ease of use, how quickly novices can now produce self-satisfying results. For this alone, technology is a good thing. Nuclear weapons and communications satellites are weaving a single fabric of world cultures. On one hand we have the often oppressive monolith of the Hollywood hit machine, on another are the transethnic musics of "classicist" Lou Harrison, Indian violinist L. Subramanian, IRCAM whiz kid Tod Machover. Transethnic music is everywhere. The central Asian modalities and odd (as in 7, 11, etc.) meters of the Balkans fired the music of Bartok and Stravinsky. Do not lament! Overthrow commercial programmers! Don't patronize the homogenizers! Let's Dance to More Live Musicians!

JAMES STOCKFORD: Musicologists will remember 1985 as the year musicians accepted personal computers. Indeed, some music stores now sell more software than guitars, software that enables the latest electronic soundmakers — keyboards, rhythm machines, synthesizers — to work together in concert.

What makes all this possible is a new musical instrument communication standard called MIDI. MIDI defines computer codes for musical noises. A MIDI device digitally stores information about what note is hit, how hard, and for how long. With this coding system, a musician can create and record a composition right on a personal computer, then modify it, print it out as sheet music (with all the complicated notation precisely pictured), or play it through a sound system.

The right software can provide an entire orchestra practically at the wave of a hand. An impoverished composer can create lavish fantasies on a cheap home computer, then take the disks to a studio or a friend's house and play to the sound limits of the best available equipment. Transcribing the notes is as easy as printing out computer text using a word processor.

This technology is available now. What you need is a microcomputer, some software, and a MIDI interface device to connect your micro to a MIDI instrument. There are two kinds of MIDI interfaces: smart and dumb. A "smart" interface performs many essential functions automatically; a "dumb" interface requires more instructions from the musician's software but is much less expensive.

The recommended smart interface is the Roland MPU 401 (RolandCorp U.S., 7200 Dominion Circle, Los Angeles, CA 90040; 213/685-5141). The standard dumb interfaces are from Passport Designs, Yamaha, or Korg, and usually are referred to simply as "Passport" interfaces. If you're a hobbyist or just wetting your feet in electronic music, you can get by with the Passport interface.

For the Commodore 64

Dr. T's MIDI SEQUENCER PROGRAM

Not copy-protected. $125. Commodore 64. Requires MIDI interface. Dr. T, 24 Lexington Street, Watertown, MA 02172; 617/926-3564.

JAMES STOCKFORD: A MIDI sequencer program controls MIDI-speaking instruments the same way the holes in a player piano roll control the piano notes. But in this case, you're the one who punches the tape. Dr. T's program makes it especially easy to compose new sound ideas on the Commodore 64, then shift them around till you get the sound you want. Musicians who've used it are unanimous in their praise.

For the Apple II

MIDI Interface, MIDI/8 Plus, LEADSHEETER

MIDI Interface, $149.95; MIDI/8 Plus, $149.95; LEADSHEETER, $99.95. All copy-protected. Apple II family; Commodore 64. Passport Designs, Inc., 625 Miramontas Street, Suite 103, Half Moon Bay, CA 94109; 415/726-0280.

JAMES STOCKFORD: For Apple II owners who want it all now, Passport's three products work together reliably. You can compose, rearrange compositions, control a MIDI instrument, even print out melody lines and chords in standard music notation.

LEADSHEETER is the only transcription software we recommend for the Apple II. It prints only three staves, but it does connect the beams between adjacent eighth and sixteenth notes.

JOE WEST: One of the oldest surviving music software companies, Passport Designs still has the easiest Apple II software to use. It lets you record MIDI information on eight tracks with overdubbing and linking sections, and has good editing features. You can fix a single wrong note, even edit a note to within 1/24 of a beat. For $300 that's quite a deal.

For the Atari
Midimate and Miditrack II

Bob Moore. $350. Atari 800 XL or 65ME. Requires audio amplifier. Hybrid Arts, Inc., P.O. Box 480845, Los Angeles, CA 90048; 818/508-7443.

DANIEL SHARP: A serious composing and performance tool, this combination of an interface box and software lets you use the Atari to control one or more synthesizers. It gives you complete control over the composing process, much like Dr. T's program for the C-64.

JOE WEST: This professional MIDI system for the Atari has all the features musicians have asked for: excellent editing, realtime or non-realtime note entry, ability to synch to a tape recorder, to repeat sections, to chain sections to each other, and to change mistakes easily. It's a struggle to learn, though.

For the IBM and compatibles
SEQUENCER PLUS

Copy-protected. $495. IBM PC/compatibles. Requires Roland interface, MIDI instrument and amplifier. Octave Plateau Electronics, Inc., 51 Main Street, Yonkers, NY 10701; 914/964-0225.

JAMES STOCKFORD: This MIDI composing and rearranging software is a very logically constructed digital imitation of an analog tape recorder with 64 recording tracks. It is especially suited for musicians who are used to sophisticated multi-track recording. You have lots of room to try things out.

For the IBM and compatibles
PERSONAL COMPOSER

Jim Miller. $495. IBM PC/compatibles. Requires Roland interface, MIDI instrument with audio amplifier. Personal Composer, 14000 Edgewater Lane NE, Seattle, WA 98125; 206/364-0306.

JAMES STOCKFORD: PERSONAL COMPOSER is a miracle for transcription and composition. Its printing resolution is wonderful, and it has a large library of transcription symbols, with graphic sprites so you can make your own. IBM owners who are serious about music and who want a composing software tool that prints high-resolution sheet music will find nothing else that approaches the power of this program.

For the Macintosh
CONCERTWARE

Not copy-protected. $49.95. Macintosh. Great Wave Software, P.O. Box 5847, Stanford, CA 94305; 415/852-2280.

KEVIN KELLY: In the usual Mac fashion of dealing in images, this program makes music interactively graphic. Look! It's music you make with a mouse, pointing to a note, dragging it over to the music staff, clicking the image to hear it played. A music score is painted in and then plays itself. To change the tone and color of a note, draw its waveform on the screen with Mac graphics and listen to the tintinnabulations.

Keyboard Enhancers

For the Commodore 64
CZ RIDER

$149. Apple II family. Requires Passport or Roland interface and MIDI instrument with audio amplifier. Cherry Lane Technologies, 110 Midland Avenue, P.O. Box 430, Port Chester, NY 10573; 914/937-8601 or 212/824-7711.

JAMES STOCKFORD: This is special software for C-64 owners who also own one of the Casio MIDI keyboards, CZ 101 or CZ 1000, which are available at most department stores and music stores and sell like hotcakes. Not only can you arrange and rearrange compositions with CZ RIDER (something you can't do with the keyboard), but you can customize the CZ keyboard's sounds, a difficult trick using the CZ alone.

For the Apple II
DX HEAVEN

$149. Apple II family. Requires Roland interface, MIDI instrument with audio amplifier. Cherry Lane Technologies, 110 Midland Avenue, P.O. Box 430, Port Chester, NY 10573; 914/937-8601 or 212/824-7711.

JAMES STOCKFORD: Apple owners who also own the popular Yamaha DX-7 piano keyboard or one of its family of sound generators know how difficult it is to use this powerful instrument. To adjust the sound quality, you have to keep track of several parameters that appear alternately in a tiny LCD display, which is very awkward and weird.

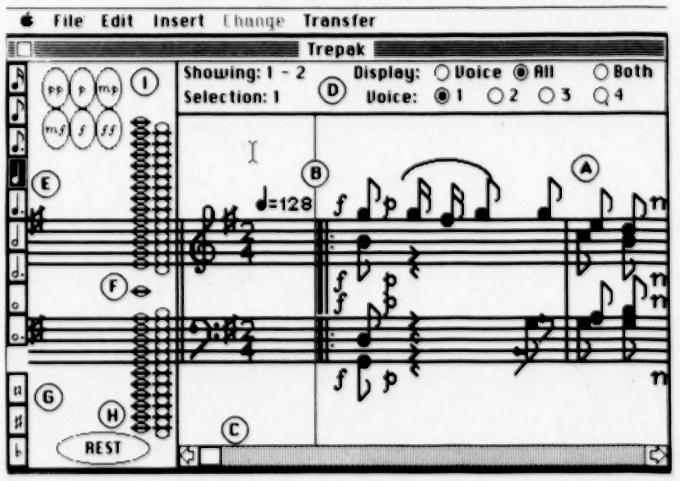
DX HEAVEN provides a visual record of your musical experiments on the Apple monitor so you can see everything at once. It also allows easy editing and lets you store your work on a floppy disk library so you can instantly invoke a sound that may have taken weeks to create.

For the IBM and compatibles
DATA/7 and PERFORMANCE/7

Copy-protected. $125 each. Commodore 64; Apple II family; IBM PC. Requires Passport or Roland interface. Minetics Corporation, P.O. Box 60238, Station A, Palo Alto, CA 94306; 408/741-0117.

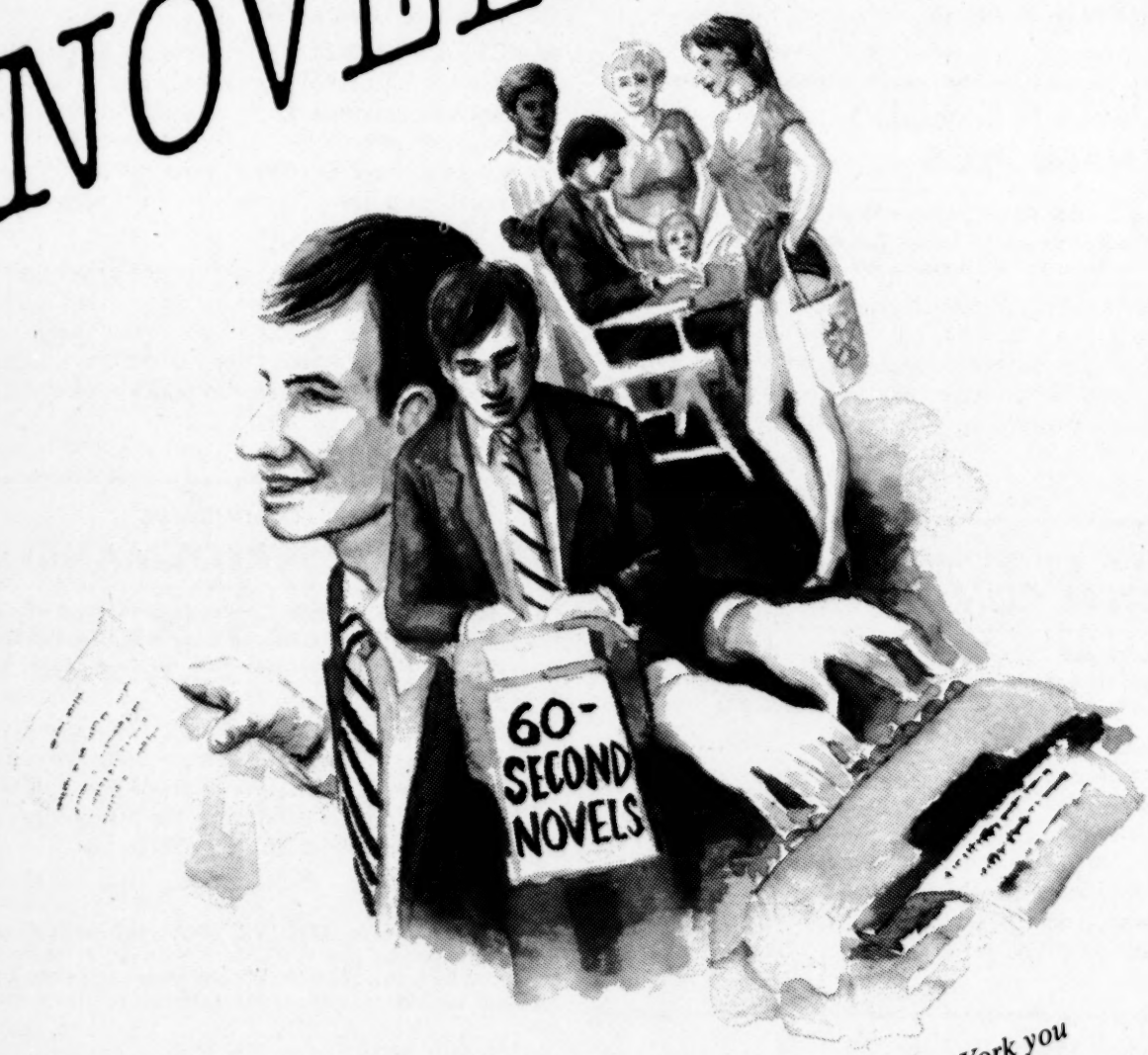
JAMES STOCKFORD: IBM PC and C-64 owners with a Yamaha DX-7 will appreciate these software aids. DATA/7 and PERFORMANCE/7 offer convenience similar to DX HEAVEN, but on two programs: the first creates sounds, the second stores them for instant retrieval.

The "dashboard" of CONCERTWARE: (A) music display box, (B) insertion point, (C) scroll bar, (D) voice and display selection buttons, (E) note length boxes, (F) note pitch buttons, (G) accidental boxes, (H) rest button, (I) volume buttons.



CONFESSIONS OF A 60-SECOND NOVELIST

by Dan Hurley



When you call Dan Hurley's answering machine in Brooklyn, New York you hear the loud clatter of a typewriter (ding!) in the background as the world's only 60-second novelist completes another novel before the end of the beep. The plot is about how a young man makes it in the big city by ignoring reality and living up to his dreams.

—Kevin Kelly

illustration by Kathleen O'Neill

I AM WALKING ALONG CHICAGO'S MICHIGAN AVENUE, lugging an all-metal 1950s Royal typewriter atop a folding chair, and wondering how people are going to respond. They might laugh at me, punch me, arrest me, steal my typewriter, or — worst of all — ignore me. But these thoughts seem romantic. Anyone who has ever gone streaking must know how I feel as I sit down for the first time with the typewriter in my lap and a little sign that reads:

60-SECOND NOVELS Written While You Wait

I feel freedom, abandonment, maybe even enlightenment. I have no idea what I'm doing. And I know I have never been more alive.

The whole thing began as a joke. I was sitting on the company bus going to work with my friend, Mary, when I said, "Wouldn't it be funny if somebody took a typewriter onto the street and wrote stories and handed them to people?" Mary and I both laughed too loudly at this idea for the company bus. The company was the American Bar Association, where I work as editor-at-large, an obscure title which means I edit, write articles, and develop story ideas for ABA publications. It is supposed to be a good job, yet it is not really me. When the company bus arrives at the ABA building, everyone files out *in order,* from the first row to the last. I, on the other hand, am the sort of person who imagines writing novels on street corners.

After a year of merely imagining, I figure that because this is the most embarrassing and ridiculous idea I've ever thought of, I *have* to do it. So here I am, sitting on the sidewalk of fashionable Michigan Avenue, across from the old Water Tower. It is a warm spring day, April 30, 1983, and everyone is out for a Sunday stroll. Most of the people walking by me are well-off tourists from somewhere in the Midwest. The majority of them are lost in their thoughts, staring listlessly, not seeing anything around them. Many people look at me, do a double-take, and then laugh in good will and appreciation. Others look but pretend not to see. Beautiful women smile and say, "This is wonderful!" or "I have no idea what you're doing, but I love it!" Little children come up and ask what I am doing, but I cannot give them any answers. They do not mind; they just want to play with my typewriter.

Some people frown at me. At first, I cannot understand that. But then I realize why I disturb them. I am new. I am change. That is not far from death. I represent the fact that one day the world will change sufficiently that it will leave them dead.

One old woman asks if I am selling the typewriter. Another tells her friend, "It must be some sort of trick." One guy asks if I'm a cripple. Person after person wants to know, "What are you doing?" I keep telling them, "I don't know." But unlike the children, these grown-ups are dissatisfied with mystery. They want it all spelled out. They get annoyed. I find this most enjoyable.

A few people ask how many words per minute I type. This is truly relevant. I'm typing instant novels on the street, and the only thing that stirs their interest is how many words per minute. This sort of thinking explains why the world is on the brink of nuclear destruction. When I call out to ask passersby if they want a novel, most of them try to weasel out with replies such as, "Not today." But I respond, "How about tomorrow at five-fifteen?" Others say they don't have time. They don't have time for a 60-Second Novel. I make a note to tell my grandmother about these people, so that she can pray for them.

Finally I start to write a story, with or without a customer. Given that no one has ever written a 60-Second Novel before, the genre is wide open. I've landed in the New World, the Wild West of literature. And it is my Manifest Destiny to make it my own. My first 60-Second Novel reads in full:

> One day Dan Hurley got this crazy idea to go out on Michigan Avenue to see what would happen if he began typing on the street. People walked by and laughed. He felt sort of strange. Wouldn't you?

Not a masterpiece, but did you ever see the first sonnet? The first screenplay? Everyone has to start somewhere. After typing it, though, I don't know what to do with it. I walk up to a woman passing by and hand it to her. She reacts as though I am giving her a flyer for Shlomo's Sex Parlor. ►

But now that I have started typing, people are coming up and asking if I'll do one for them. Suddenly I have a crowd around me. They're cheering me as I type, as though I'm O. J. Simpson running for a touchdown. When I read the story, everyone applauds.

And I'd always thought that writing was the lonely art.

Now, two months and two hundred novels later, I realize that something is at work here. People are talking to me as though I am a psychologist, or a priest in confession. One young man tells me that the novel I wrote for him changed his life. "You put a rainbow over my clouds," he told me. After writing for a young woman, she mails me a card. On the cover are printed the names, "Shakespeare . . . Francis Bacon . . . Leo Tolstoy . . . O. Henry." Then, on the inside is written, " . . . and now — Dan Hurley! Bravo! Again, thanks for helping me to help myself."

One woman asks me to write a happy birthday novel for her live-in boyfriend. I ask her if they are planning to get married, and she says no. I ask her why not, and she explains that he doesn't have a job. I ask if that is the only problem, and she says no. She hesitates. Is he violent? I ask. Yes. She says that nobody else knows this except her family, but yes, he beats her up. I ask why she is living with him, and she says she doesn't want to be alone during the Christmas holidays. So I write her the happy birthday novel. The title is, "I'm Addicted To You."

Not all of the people reveal anything psychologically profound. A sexy brunette named Barbara comes up one day with a defiant, flirtatious look on her face, and says, "Okay, kid, *do me.*" I begin to write her novel, while she says how cute I am. She asks if I am married. Then she asks if I have had dinner yet. Since I am in the middle of work, however, she ends up leaving with a guy standing next to her, who literally puts her over his shoulder and carries her off.

But this is not the end of Barbara. Like other customers, she feels a need to communicate further. So two months later she calls up at two a.m. and asks if I have ever had phone sex.

Good material for my novel, right?

By now it is October, and my fingers are often painfully cold. I have written novels for married secretaries having affairs with their bosses. I have written eulogies for people's dead dogs. I have written a novel for a young man tripping on LSD who kept repeating, "You look like Jesus." I have written a novel entitled, "Michael Needs To Get Run Over." I have written "Brand X Mystery Novel." I have written the story of "Nancy And The Stinky Town Of Two Thousand Four Hundred People And Seventeen Streets And A Husband In Menopause." And in one of my longest titles ever, I have written, "The Story Of A Young

Med Student Whose Heart Is Broken Because He Likes To Talk And Have Fun But She Just Likes To Sit There And Look Beautiful And Be Quiet, And Since He's A Conversationalist And She Isn't, Even Though She's An Intellectual And One Of The Most Interesting Girls He's Ever Met, It Makes Him Depressed That She Doesn't Like To Talk, Since He Thinks The True Basis Of A Relationship Is Conversation, And She Doesn't Even Like To Have Sex."

Sometimes I continue writing into the evening, and then I have to ask people to move out of the way of my only light source: the street lamps. My knees are stiff when I stand up, and the typewriter makes an indentation into my thighs. My mind is so tired after writing 50 novels one afternoon that I actually fall asleep right on the street. But I'm earning up to $100 a day at it and being covered repeatedly by the local and national news media. So I decide to see how far I can take this 60-Second Novel business during the winter months.

First I write to Norman Mailer and John Irving, challenging them to a 60-Second Novel writing contest. I see it like a heavyweight boxing match, with TV coverage and betting and crazed fans. Two weeks later, I receive a letter from a woman at John Irving's agency, Literistic, Ltd. She writes in full: "Thank you for your letter. I believe it was John Cheever who said that fiction is not a competitive sport."

Soon after, I receive a letter back from the Scott Meredith Agency, reviewing the first version of this collection of 60-Second Novels. It reads in part:

> I'm sorry to bring you bad news here, Mr. Hurley, but we're returning this one as unsaleable. We find that the only really fresh and vital thing about this package of your writings is the fact that you actually write them on the streets. The material itself is stale. Norman Mailer, our distinguished client, doesn't need to write novels submerged in swimming pools.

For this, I have paid $150.

But one week later I am picked up by a chauffeur and driven in a limousine to meet Willard Scott, the weather man for the national "Today Show." Sitting outside in the snow, I write a story for Willard and about 10 million other Americans. Maybe that reviewer at the Scott Meredith agency is among them, submerged (I hope) in his bathtub.

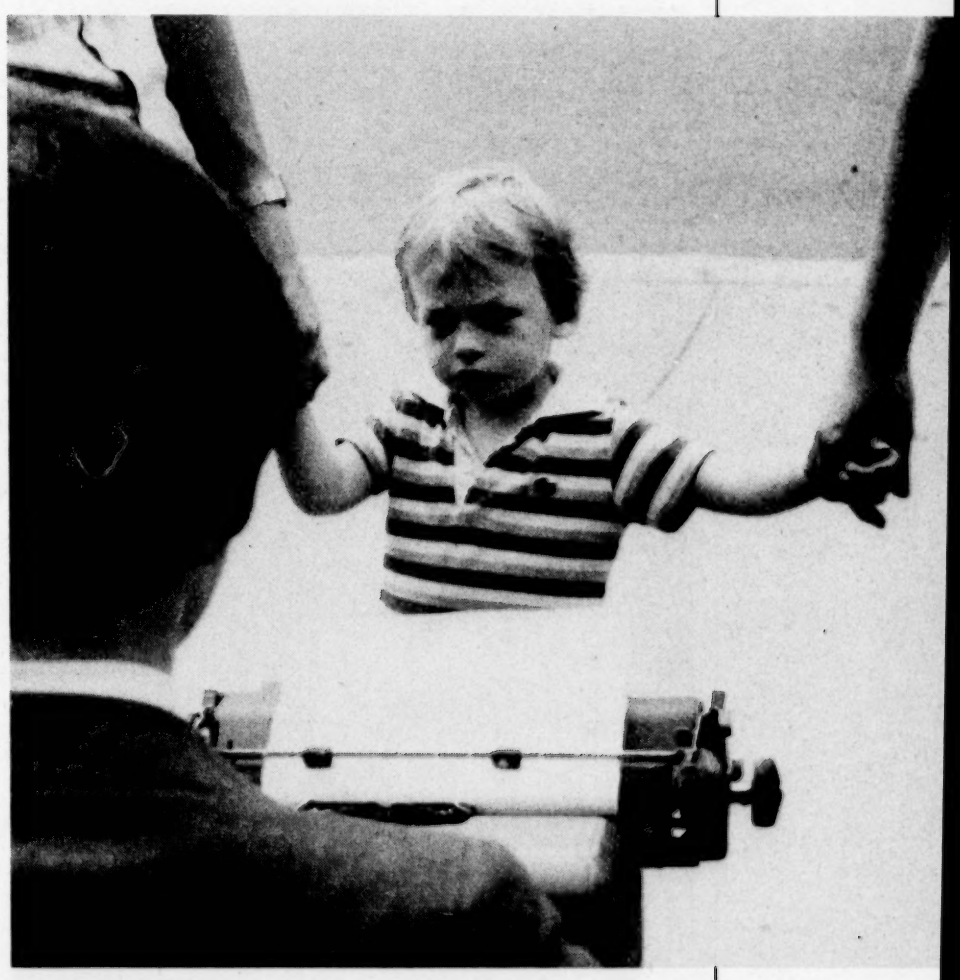
By the end of the winter, I realize that 60-Second Novels are more than just a short affair. I feel I have fallen in love, and I just know I have to get married. I know I have to quit my job and become a full-time 60-Second Novelist.

Try telling that to your mother. As my brother always says to people when he's telling them about my work, "It's a tragic story." Telling people that you are quitting your job to become a street writer is akin to telling them that you're quitting to become a full-time fool. Never mind that strangers recognize you on the street and wave to you. Never mind that you're more excited and turned on than you have ever been in your life. What I am up to is an unreasonable, experimental dream.

On the other hand, I'm earning more money than I did at the A.B.A. So on May 31, 1984, I take my last ride on the company bus. But when everyone else begins filing out in order, I run from the back of the bus to the front — *out of order.* Can you blame me for that last little bit of deviance?

During the week surrounding the Fourth of July, I write over 300 novels at a huge outdoor festival known as "Taste of Chicago," the Midwest's version of a Roman food orgy. I have beer spilled down my back, ice cream dripped on my shoes, cigarettes rubbed out on my typewriter, and chewing gum stuck to my chair (and subsequently to my butt). I am rained on, yelled at, and pickpocketed of over $100. Also, I meet my first dissatisfied customers.

Their names are Sue and Jeanie. As they walk by, Sue says, "What a queer way to make a living." Her friend disagrees, saying that it is



interesting and industrious. So they ask for a novel, and Jeanie explains that Sue looks down on everything in life. I basically write what they say, while adding comments like, "I don't live my life by people's opinions. If I did I certainly wouldn't be doing this." A half hour later, they return and say they don't like their novel. I offer to refund their money, but they decline. Sue then stands in front of me for about an hour, yelling at anyone who passes by that I'm no good. Finally I read their story to the crowd of people surrounding us, and everyone says they think it's great. At last I offer to write Sue a new story. She agrees. In it, I tell her, "I'm sorry that you have nothing better to do than get angry at people on the street. That's what bag ladies do, they get angry at nobodies. Is there something in your past that is still annoying you? I recommend that you give it up, let it go, and start enjoying your life." Sue reads the story aloud to the crowd, thinking it will make me look stupid. But by the end, she's forcing herself to laugh along with it, as if she's in on the joke.

She concludes the reading by slapping me in the face.

Chicago begins to seem like too much of a cow town. So after checking out the scene in New York City, I move there on July 15. I find myself living in a shoebox in Brooklyn, and working side-by-side with sensational break dancers, eye-popping magicians, and even a young man who takes my idea and creates instant, personalized cartoons. In Chicago I was bizarre and outrageous; in New York people roll their eyes and say, "Only in New York."

By year's end, I have worked inside Macy's, B. Altman, Regine's, the World Trade Center, the Helmsley Palace, Tavern on the Green, the Whitney Museum, and even Caesar's Palace on New Year's. I have written for Mike Love of the Beach Boys, M*A*S*H producer Larry Gelbart, rock star Alice Cooper, and over 3,000 other people. I am making twice as much money as I made as an editor, and I am earning more than all but the most successful best-selling authors — without having published a single book. This is what is known as beating the system.

Finally I decide to crack the publishing world with this collection. It teaches me a lesson about the distinction between writing novels *live* on the street and presenting them as literature in a book. On the street, people are amazed at how fast I can type, let alone that I'm creating an original story based on what they tell me. Sometimes they sit down, cross-legged, on the sidewalk in front of me and just watch, as though I'm a TV show. Sometimes they all stand there breathlessly, their eyes wide, as though I'm a magician, or an Olympic skater. Grandmothers say, "What a nice boy," avant-garde painters call it performance art, advertising executives say it's a great gimmick, real estate moguls call it the work of an entrepreneur, and believers in the occult

call it mind reading. Whatever they call it, everyone seems impressed that here, indeed, is something new under the sun.

But in publishing, everything must fit into a category. Are these 60-Second Novels, ask the publishers, fiction or nonfiction? Are they serious or humorous? Are they essays or short-short-short stories or person-on-the-street interviews or stream-of-consciousness scribblings or prose poems?

I have but one answer for these questions: They are 60-Second Novels. I wrote the first drafts on the street for real people, hoping to kick the literary establishment in the knees, to break through the wall between reader and writer, to reestablish the possibility of communication through the printed page, to revive the dreadfully moribund and calcified state of modern literature, to upset some old fogies if I could, to make a real difference in people's lives, to write the best stuff I was capable of, and to have fun. Now that I have carefully rewritten and edited 60 of my favorites, they shall take on their own life and leave me, their father, behind. Good luck I say to them and to their mother, the thousands of people who participated with me in the creative act.

As for me, I am ready for the next adventure. I wonder when I'll have another chance to write for an old bag lady in a nightgown and galoshes. Or for the wife of a Fortune 500 company president, who tells me her job is "sleeping with the chief executive officer." Or for an old man who wants to know how to face the fact that all his friends are dying. Or for a three-year-old girl who tells me she wants to be president of the United States.

But I know I'll find that next adventure, because pursuing my vision of the 60-Second Novel has opened my eyes to what Helen Keller saw when she said, "Life is either a daring adventure, or nothing."

IT'S ALL SO CONFUSING

Jim and Karina were walking down the street when they heard a loud, thunderous voice from the heavens. It was the voice of THE AUTHOR!!!

"Are you boyfriend and girlfriend?" asked the voice.
They couldn't answer for a moment.
Then the voice of the author asked them, "Friends?"
And that was safer, more neutral, so they both answered yes.
"Why did it take you so long to answer when I asked if you were boyfriend and girlfriend?" asked the author.
"Because," said Jim — and cleared his throat — "because we're not sure at this point."
"How long have you known each other?"
"That's a good question," said Jim. "You want exact times or what? Oh, about six months."
"So when will you be sure about each other? Tell me what's the confusion."

"Oh my God," said Jim.
"If we knew we wouldn't be so confused," said Karina.
"Well you two both look like nice, good-looking, friendly people. What are you waiting for?"
"I don't know, actually," said Karina. "I just want to get a handle on my feelings."
"Oh I lack courage," said Jim. "I don't know. It's an adventure. Life. This relationship."
"Have you talked about this before?" asked the author.
"Yeh," said Karina.
"Hypothetically," said Jim.
"What conclusion did you reach, since now that we're at the end of the story, we need a conclusion?"
"I guess the conclusion is that there is no conclusion yet," said Jim.

TWO MONTHS LATER

Karina and Jim pass by the author again. This time Karina is wearing a bright red jacket, and she has a rose in her hand. She is holding Jim's hand and leaning against him. She keeps looking up at him with this dreamy look, and she has just leaned over and kissed him. Jim is looking very happy. He's trying to be cool about it, he's trying to remain reserved, but he obviously is in love. "We've been looking for you," says Jim. "You kind of sparked us into falling in love."

"At least we're not confused anymore," says Karina.

"So are you husband and wife?" asks the author.

They look confused again. ■

Illiterate America

ART KLEINER: I was in a corner store the other day. A woman said, "Where's the sour cream?" The clerk showed her, and she snarled, "That's cottage cheese." It was sour cream in an unusually large container — the way cottage cheese is sold. She burst into a rant of defensive curses: "That ain't sour cream!" — and ran out of the store. Before reading this book, I would have thought she was crazy. Now I realize she couldn't read the label.

Author Jonathan Kozol (who also wrote ***Death at an Early Age****) starts simply: one-fourth of American adults can't read well enough to function except in a very narrow daily life. He reveals the private grief of an illiterate person (can't travel because they can't follow street signs; living in constant terror of being found out). Then he offers some simple conclusions, most of which contradict conventional wisdom: 1. Illiterate people do too want to learn to read. 2. The materials and programs for teaching reading are as bad as if they were specifically designed to prevent people from learning to read. 3. A lot of the hate and fear between whites and blacks is really between readers and nonreaders. 4. Any technology-based culture with so many people shut out is in a lot of trouble . . .*

The hell with computer literacy! If enough people learn to just-plain-read, computer literacy will follow. But literacy is dangerous; it enfranchises people who have no stake in the status quo. Trouble is, lack of literacy is even more dangerous in the long run. Kozol's remedies are ingenious and seem to have worked a bit: neighborhood classes in apartments, volunteer effort, using local oral history as the reading matter, encouraging people to write, giving away books, putting more public money into reading. Letting the poor take some pride.

Illiteracy is frustrating for everybody (including writers watching their audiences diminish). This book is a start toward healing. I hope it has an influential following.

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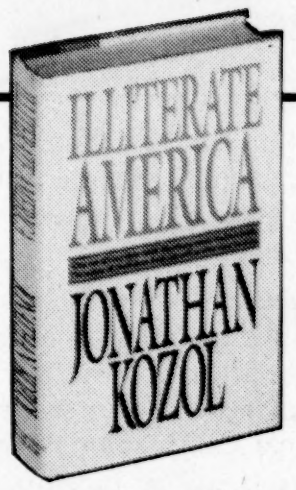
Given a paycheck and the stub that lists the usual deductions, 26 percent of adult Americans cannot determine if their paycheck is correct. Thirty-six percent, given a W-4 form, cannot enter the right number of exemptions in the proper places on the form. Forty-four percent, when given a series of "help-wanted" ads, cannot match their qualifications to the job requirements. Twenty-two percent cannot address a letter well enough to guarantee that it will reach its destination. Twenty-four percent cannot add their own correct return address to the same envelope. Twenty percent cannot understand an "equal opportunity" announcement. Over 60 percent, given a series of "for sale" advertisements for products new and used, cannot calculate the difference between prices for a new and used appliance. Over 20 percent cannot write a check that will be processed by the bank — or will be processed in the right amount. Over 40 percent are unable to determine the correct amount of change they should receive, given a cash register receipt and the denomination of the bill used for payment.

•

Today, as the code words for survival in the hi-tech industries become "retraining" and "decision making" and "decoding," the problem becomes greater while it also grows much harder to conceal. Corporations will be able to "retrain" only those who can participate in training programs. Those who cannot read the training manuals — persons who, in another age, could nonetheless scratch out an income by the bending of the back and patient labor of the hands — may find no work at all. Even if the economic situation is improved, and opportunities for jobs expand, there will not be jobs that can be filled by people who can read at less than ninth grade level. "By the 1990s," according to Dorothy Shields, education director of the AFL-CIO, "anyone who doesn't have at least a twelfth grade reading, writing, and calculating level will be absolutely lost."

Illiterate America
Jonathan Kozol
1985; 270 pp.
$15.95
postpaid from:
Anchor Press/
Doubleday
501 Franklin Avenue
Garden City, NY 11530

or Whole Earth Access



How to Read a Book

T. DURSO: Adler and Van Doren propose a reexamination of the much-overlooked idea that there are techniques for reading books, just as there are techniques for driving in the rain and playing soccer. They've resurrected and present here a collection of rules and instructions of the sort used in the Middle Ages as part of the trivium of logic, grammar, and rhetoric. Few people could read then, but the ones who could usually read very well. The authors believe that with this rhetorical tool kit and a lot of hard work, most people can learn to do the same.

I spent 6½ years in college. My best intellectual happening there was coming across this book.

KEVIN KELLY: I spent 1 year in college. I dropped out after reading this book. Under its tutorship I read a fair chunk of classic literature with more enthusiasm, insight, and reward than came with university classes.

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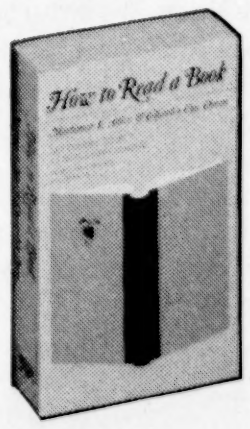
Analytical reading is thorough reading, complete reading, or good reading — the best reading you can do. If inspectional reading is the best and most complete reading that is possible given a limited time, then analytical reading is the best and most complete reading that is possible given unlimited time.

The analytical reader must ask many, and organized, questions of what he is reading. We do not want to state these questions here, since this book is mainly about reading at this level: Part Two gives its rules and tells you how to do it. We do want to emphasize here that analytical reading is always intensely active. On this level of reading, the reader grasps a book — the metaphor is apt — and works at it until the book becomes his own. Francis Bacon once remarked that "some books are to be tasted, others to be swallowed, and some few to be chewed and digested." Reading a book analytically is chewing and digesting it.

How to Read a Book
Mortimer J. Adler and
Charles Van Doren
1940, 1972; 426 pp.
$8.95
($10.45 postpaid) from:
Simon & Schuster
Attn.: Mail Order
1230 Avenue of
the Americas
New York, NY 10020
800/223-2348
or Whole Earth Access



A Dance to the Music of Time

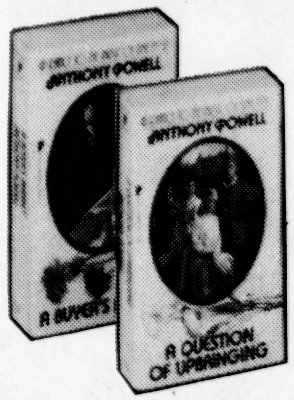
STEVEN LEVY: This summer I made my literary escape on the wings of Anthony Powell, an English writer whose reputation has long surpassed his actual popularity. This is probably due to the intimidating length of his masterwork, ***A Dance to the Music of Time****, 12 volumes (4 3-book movements) and well over a million words.*

Powell has often been called a postwar Proust. But as I devoured book after book of this series, it was clear that Powell is much easier to read than Proust. And though ***A Dance*** *constructs a world every bit as detailed (and even somewhat more populous) than the more intoxicating Proust-world, I found Powell's lighter touch (something of P.G. Wodehouse here) more encouraging in the long run.*

And this certainly is a long run. It begins in the early 1920s with our intrepid narrator, Nick Jenkins, in an Eton-like public school and follows him into the 1960s. The series' third three-book "movement" is a fascinating portrait of England at war. But history is background here to an absorbing social panorama. The sheer length allows Powell room to comment on, gossip about, and reveal his characters so deeply that I began to think about them as people I knew. Epiphanies here are truly earned. I got severely hooked, and by the bang-o sixth volume, ***The Kindly Ones****, I was beginning to neglect all else to continue the series.*

Since last April, Warner Books has released a volume a month. The finale, then, won't be out until next spring. At around four bucks for each mass-market-size paperback (and at around 200 pages a shot), this is rather pricey. (On the other hand, a movie costs more and is infinitely less edifying.) The more desirable hardbacks, published by Little Brown & Co., are harder to find and variously priced, depending on how long they've been in the bookstore. Looking around last August, I found the first movement (volumes 1-3) on sale for $24.50 and, at the same store, the third movement for $12.50 (which I snatched up). A different store had all four movements for $19.95 each. Fortunately, you can find Powell in most libraries.

A Dance to the Music of Time
(12 volumes)
Anthony Powell
1963, 1964, 1971, 1976
$3.95
($4.95 postpaid) from:
Warner Books
P. O. Box 690
New York, NY 10019
or Whole Earth Access



I'm just cracking Volume 12 now, and I'm sorry there won't be more. I'd almost forgotten what it was like to go Total Immersion into a world made magical by a fellow human's wit, imagination, and emotion. For me, reading ***A Dance*** *has been a rediscovery of reading itself.*

•

One evening, when Mr. Templer had come suddenly out of one of his gloomy reveries, and nodded curtly to Babs to withdraw the women from the dining-room, Sunny Farebrother jumped up to open the door, and, in the regrouping of seats that took place when we sat down again, placed himself next to me. The Templers, father and son, had begun to discuss with Stripling the jamming of his car's accelerator. Farebrother shifted the port in my direction, without pouring himself out a second glass. He said: "Did I understand that your father was at the Peace Conference?"

"For a time."
"I wonder if he and I were ever in the same show."

I described to the best of my ability how my father had been wounded in Mesopotamia; and, after a spell of duty in Cairo, had been sent to Paris at the end of the war: adding that I was not very certain of the nature of his work. Farebrother seemed disappointed that no details were available on this subject; but he continued to chat quietly of the Conference, and of the people he had run across when he had worked there himself.

Choice

ART KLEINER: To follow any specialized field, you should keep up-to-date with new academic books on the subject. Reading ***Choice*** *magazine is like peeking over the shoulder of an acquisitions clerk in a large university library. "Oh, hey, what's this — a biography of the Fourteenth Dalai Lama? The origins of the Seder? How television transformed sports? The military use of space?" There are several HUNDRED such books reviewed in each issue.*

Choice *is edited for university librarians and written by university professors, but you'd never know it from the readability of the one-paragraph book descriptions. Perhaps because it's a trade publication of sorts, the reviews seem trustworthy; they're skeptical and often try to pin down the strengths and weaknesses of each new book.* ***Choice*** *is made particularly useful by an annual cumulative index; I'd look for it at your library.*

[Suggested by Dr. Julius Kleiner]

•

DE RIOS, Marlene Dobkin. Hallucinogens: cross-cultural perspectives. New Mexico, 1984. 255p ill index 84-7244 22.50 ISBN 0-8263-0737-X. CIP

De Rios, who has conducted significant research on hallucinogens in socio-cultural context, is one of the most prolific and imaginative synthesizers of the diverse and scattered international scientific literature on the subject. A major portion of this work is devoted to brief but informative summaries of the meanings, uses, and outcomes of psychotropic plants in 11 non-Western societies (in Australia, Siberia, North America, Africa, Latin America, and Papua New Guinea). On the basis of those case studies, some important generalizations are offered. Abuse of such drugs (in the sense of danger to the health of an individual or harm to society) is rare; use is usually highly ritualized, with magical and religious associations paramount. The effects of such drugs are as culturally determined as are the patterns of use, with expectation a major factor in the context of hallucinations. The visions often serve to diagnose and heal illness or to predict the future. Far from being socially disruptive, most of the hallucinogens in customary usage around the world play important roles in promoting social solidarity. As sound as they are, neither Erica Bourgignon's *Religion, Altered States of Consciousness, and Social Change* (CH, Jan '74) nor Peter Furst's *Flesh of the Gods* (CH, Feb '73) is as broad and clear as this volume. Appropriate illustrations, a good bibliography, and an index. For undergraduate and public libraries. —*D.B. Heath, Brown University*

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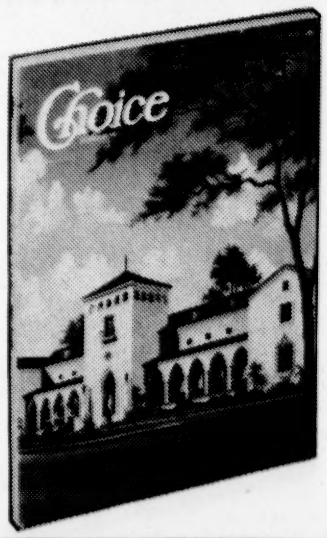


CONVERSATIONS WITH A GORILLA

Francine Patterson, director of the Gorilla Foundation, talks with Koko.

IF GORILLAS COULD TALK, what would they say?

The following is a transcript of dialogues with two gorillas: Koko, 14, and Michael, 12. The chit-chat happens in slightly modified hand sign language (ASL), the same language American deaf are taught. As the conversations show, gorillas can understand spoken English to some extent, and can read some as well. Sections of these dialogues have been rearranged chronologically; breaks indicate time intervals ranging from hours to months. The recording and annotation of these conversations were done at the Gorilla Foundation (17820 Skyline Boulevard, Woodside, CA 94062) by Francine Patterson, Janet Cebula, Barbara Hiller, Debi Wilkinson, and Joanne Tanner. —Kevin Kelly

Francine: We're going to get you apple juice for your birthday (voice only).
Koko: *Good.*
F: What else would you like for birthday?
K: *Drink there.*
F: But what presents do you want?
K: *Cat.*

□

Almost six months later, Karen Gallinetti brought three four-week-old kittens to visit Koko. The kittens had been abandoned by their mother and nursed by a puppy-less Cairn terrier. One of the tiny kittens was a Manx.

Karen brought the Manx up to visit Koko.

F: What name kitty?
K: *Apple.*
F: No, that's a dog's name. (Apple is a dog at the Gorilla Foundation). A minute later:
F: Name him?
K: *All Ball.*
F: Yes, like a ball he has no tail!

□

Francine draws a cat on Koko's birthday cake.

F: What did I draw?
K: *Ball. Koko love visit Ball.*

□

Janet: I'll give you some grapes if you'll tell me about Ball the cat.
K: *Soft.*
J: What kind of animal is he?
K: *Cat cat cat.*
J: Do you love Ball?
K: *Soft good cat cat.*
J: Is Ball fun?
K: *Teeth there visit there.* (Ball had been a biter. Koko had also commented that he was "cat Koko's dirty."

J: What games do you play with Ball?
K: *Catch good there.*

□

Then about a week before Christmas, 1984, Ball died — the victim of a passing car. When Francine told Koko what had happened, she didn't respond. Then a few minutes later she cried — the tearless hooting cry of the gorilla. Three days after this Francine asked Koko,

Do you want to talk about your kitty?
K: *Cry.*
F: What happened to your kitty?
K: *Sleep cat.*
F: Yes, he's sleeping.
K: *Koko good.*

□

Barbara: What are you going to get for Christmas?
K: *Frown bad.*
B: Why bad?
K: *Gorilla love visit.*
B: What do you mean?
Koko does not respond.
B: What you like to get for Christmas?
K: *Cat cat tiger cat.*
B: Well, pretty soon you'll have another cat, maybe not for Christmas. Can you think of anything else you'd like?
K: *Trouble trouble. Koko good.*
B: You are good.
K: *Koko gorilla love good.*
A few minutes later, Koko cried several times.

□

Francine showed Koko three drawings of cats, one partially tailed, one tailed, and one Manx.

F: When you get another kitty,

what kind would you like?
K: *That* (to the Manx).
F: We'll get you a kitty like that, is that OK?
K: *Good nice.*
Later in the same session,
F: How did you feel when you lost Ball?
K: *Want.*
F: How did you feel when you lost him?
K: *Open trouble visit sorry.*
F: When he died, remember when Ball died, how did you feel?
K: *Red red red sorry Koko-love good.*
F: Were you sad (voice only)?
K: *Frown lip visit bad frown frown-sad. Sorry.*

□

On March 23, 1985, the long-awaited new kitten arrived. Karen held the new kitten in a box.

F: What do you think? What do you think about this?
Koko purrs.
F: You happy? What do you think? What do you think about that?
K: *Pick there.* Koko points to the empty box.
F: Pick what? Oh honey, there aren't any more. This is the only one. We sort of picked for you.
K: *Think* (signed with two hands) *fake, look.*
F: You really wanted to have a choice, I think.

□

F: Do you like the kitty?
K: *Do do do.*

□

F: Tell me about the new cat.
K: *Cat red* (signed with two hands) *lip-lipstick visit.*

□

After looking closely at him, she placed him on a blanket and signed,

Lip (to herself, looking away from Ron and Francine).

Baby (as she kissed and cradled him in her arms).

Obnoxious (after he ran off for about the tenth time).

Baby (over him).

When Ron commented, "He's so pretty," Koko signed,

No.

Koko purred and put him up to her nipple, then petted him and looked into his face. She tried to open his mouth, and she inspected his paws.

□

Portrait of Koko and her kitten, All Ball. "You mouth nipple," Koko gestured, pointing to his mouth, then to her nipple.

Janet: What did you name your cat?
K: *Cat name lip, think.*
J: Why?
K: *Lip Koko.*

□

Barbara: I met your new cat.
K: *Gorilla cat tiger cat Koko-love.*
B: He's one of the prettiest kittens I've seen.
K: *Gorilla smile. Good cat Koko good.*

□

B: OK, can you tell me how gorillas talk?
(Koko beats on her chest).
B: What do gorillas say when they're happy?
K: *Gorilla hug.*
B: What do gorillas say to their babies?
(Koko beats on her chest).
B: What do you say to *your* baby (meaning Koko's favorite doll, which she calls her "Baby")?
K: *Love Koko.*

□

K: *Thirsty drink nose.*
B: Your nose thirsty?
K: *Thirsty.*
(Barbara presents some apple juice.)
B: Where do you want this?
K: *Nose.*

A mirror has many uses for Koko: she uses it for grooming her face, navel and underarms, examining her teeth, and brushing her hair. Since the age of four, she has recognized her image as "me."

B: OK.
K: *Eye.*
B: Right in your eye?
K: *Ear.*
B: OK, here it goes in your ear. (Koko is laughing.)
K: *Drink* (she opens her mouth).
B: OK, that's the best place for a drink. (Koko laughs and walks over to the window to sit down.)
On another occasion Koko was making a nest of white towels and Barbara noticed she was making the sign for "red." Barbara said, "You know better, Koko. What color is it?" Koko insisted that it was red, signing "red" three times, each sign larger than the preceding. Then, with a grin, she picked up a minute speck of red lint that had been clinging to the towel and held it up for Barbara to see. The next day she repeated the stunt with another unknowing victim.

□

Debi, who is late, enters the trailer. Koko does not approach with her usual friendly greeting. She sits in the corner staring at Debi.
D: Koko, are you mad at me?
K: *Toiletface Debi.*
D: Toiletface why?
K: *Me me me me.*
D: Koko mad Debi?
Koko looks around the room and begins signing to herself.

K: *Debi, Debi.*
Then she sticks her tongue out.
K: *Time time Debi time.*
D: Are you mad because I am 20 minutes late? There was very bad traffic, Koko. I am sorry.
K: *Bad.*
D: You're right, but I wasn't late on purpose.
K: *Pick pick pick.*
D: Yes, you are picking on me. Let's play now.
K: *Owe cookie Debi time.*
D: I have no cookies.
K: *Me Me Me apple.*
Debi and Koko exchange treats and apologies.
D: Friends again?
Koko makes her happy purring sound and signs.
K: *Chase time.*

□

Barbara: How's your reading coming along?
K: *Devil.*
B: Don't you like to read? I do.
K: *Good-dirty.* (Very small sign.)
B: Don't you really like to read?
K: *Strangle dirty.*
B: Is it hard?
K: *Work good.*
B: It's fun when you get to read books.
K: *Strangle sad sad.*
B: It's hard at first, but it gets to be fun.
K: *Hard hard work strangle . . . knock Koko good.*
B: Don't you think knocking (a game) is too easy?
K: *know please Koko love good.*
Barbara and Koko then play knocking and counting games.
B: OK, now we have to do something different.
K: *Gorilla Koko love good sleep.*
B: You feeling lazy today?
K: *Sleep Koko love.*
B: Okay, we'll rest.

□

Joanne: You want to do work?
K: *Good.*
J: You want me to write words?
K: *Good.* (Joanne gets a folder.)
J: OK, here's the word WORK.
K: *Bird.* (Koko uses this sign to refer to words.)
J: Yes, that word is WORK.
K: *Wrong word* (bird). (Koko studies the word card carefully.) *That that Koko.* (She points to the K and O in WORK.)
J: Yes, that's KOKO!
Koko opens the folder and sees an old word written there previously.
K: *That word* (bird) *DRINK.*
J: Yes! . . .
Koko picks up the folder again.
K: *That word* (bird). (She points to the word WORK.)
J: Yes, now that says KOKO WORK.
K: *Good.* (And she kisses the words.)
J: Now you're making a sentence with lots of Ks. (Joanne writes KOKO KISS WORK.)
K: *That word* (bird) *KISS.*
J: Yes.
K: *KOKO KISS word* (bird).
J: Yes, that's a sentence, the word is *WORK, with a K,* almost the same as word *WORD.*
Later . . .
J: Want me to write apple? (Koko hands Joanne a folder, then kisses her own nipple.)
J: OK, I'll write KISS NIPPLE instead. (Joanne hands the folder back.) That says KISS NIPPLE.
K: Nipple. That look apple. (Points to the word NIPPLE.)
J: Yes, looks like apple but not. Give me folder, I'll write APPLE. It has letter A.
K: *That APPLE.*
J: Yes. Where's NIPPLE?
K: *That.* (to the word NIPPLE.)
J: Yes! What other word there?
K: *Kiss.* (She kisses the word KISS.)
J: Very good!

□

"Lettuce-tree" is a two-handed sign that Michael uses to refer to acacia and bamboo branches.

Michael is another gorilla. He plays a free-association word game with **Toni.**
T: What do you think of when I say hand?
M: *Foot.*
T: What do you think of when I say hungry?
M: *Eat.*
T: What do you think of when I say dead?
M: *Stink.*
T: What do you think of when I say baby?
M: *Stomach.*
T: What do you think of when I say stubborn?
M: *Strangle.*
T: What do you think of when I say ankle?
M: *Knee.*
T: What do you think of when I say afraid?
M: *Hug.* ■

These snippets appeared in longer form in past issues of the *Journal of the Gorilla Foundation* ($25/year, 2 issues). The foundation has been offered 600 acres of ideal gorilla habitat in Hawaii and is now seeking funds to move Koko and Michael there to continue their education.

Before her 13th birthday, Koko was given a picture "catalog" of 12 gift items to choose from. Her first choice was a diary and pen. She remained firm in her choice when questioned. She uses her own log book, identical to her teachers', to practice her letters.

GOOD MOVIES

by Sheila Benson

SMOOTH TALK is the season's sleeper: A pair of exquisite performances (of which Laura Derne's should, if there is any justice in the world, get an Academy Award nomination) in a film so deeply chilling that it may never leave your memory. No violence, no bloodshed, no dark corners; only smooth, coaxing words from Treat Willians as he tries to lure uncertain blond teenager Derne to come out for a drive with him on a small town Sunday afternoon. The subject is universal — innocence and its yearnings, rebellion in a close knit family, and the hot lure of a dangerous hard guy; the implications touch every family.

Smooth Talk is a fine adaptation by Tom Coles of a Joyce Carol Oates story, directed, in her feature debut, by documentarian Joyce Chopra.

★ ★ ★

In **SWEET DREAMS** director Karel Reisz, who was fascinated by strong women before in **Isadora** and **The French Lieutenant's Woman**, follows the life of legendary country/western singer Patsy Cline. He uses Cline's own gutsy voice and a vibrant, earthy, all-stops-out performance by Jessica Lange to give a fullblown portrait of Cline, who died at 30 in the crash of a small plane. It's a sorrowful life, no matter how you look at it. The fame she clearly deserved was just over the next rise, and she had a bruising marriage to a hot-tempered hooligan (played to dangerous perfection by Ed Harris) that brought her not much more than grief and two children. Then why should you go out of your way to see it? For Patsy Cline, of course, or actually for Jessica Lange/Patsy Cline. Spectacular.

★ ★ ★

DIM SUM: A LITTLE BIT OF HEART is low-key, deadpan and to be treasured. The work of director Wayne Wang (**Chan Is Missing**) and writer Terrel Seltzer, it is set in San Francisco's Richmond district. There, completely assimilated Chinese-American daughter Geraldine Tam (Laureen Chew) faces with forbearance and a saving sense of humor her resolutely old-world mother's dictates about what a number one daughter must do with her life. The film's haunting elements come from its lovely visual style (which bows selfconsciously to Ozu, but manages to keep its own tone as well) and from its characters, who glow with an almost palpable charm.

★ ★ ★

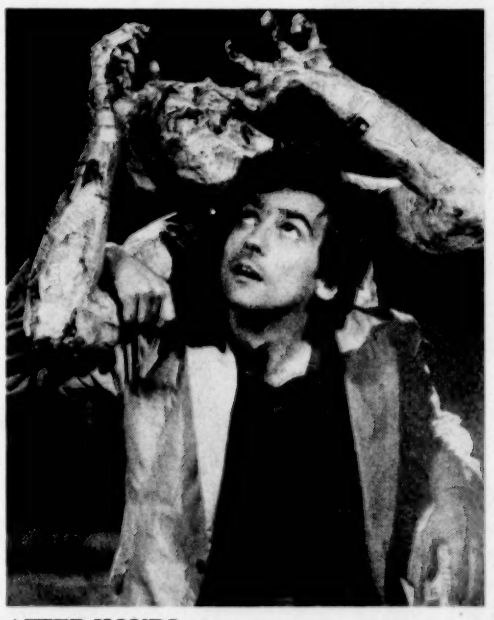
Martin Scorsese's **AFTER HOURS** is a cumulatively and darkly hilarious tale of a faintly randy computer instructor let loose in the wilds of Soho in a night that just may never end. Lured downtown (understandably) after an accidental meeting with Rosanna Arquette, our hero, Griffin Dunne, finds himself in the center of a tightening spool of fly-paper as mistakes and misapprehensions become dangerous, then ominous, then potentially fatal. What keeps the balance of the picture is Dunne's engagingly perfect comic presence, the fun of this crunch of subcultures and the feeling that this could so easily happen to anyone. This is less-dark Scorsese, but Scorsese nonetheless, and his young writer, Joseph Minion (26), is a man to watch — original and unfettered.

★ ★ ★

Everyone gets a pet film, and **CREATOR** is mine for the fall. In a story (by Jeremy Leven, from his own novel) dealing with the critical matters of life — its creation, its fullness and its untimely losses — there is so much here that is fresh, passionate and marvelously humanistic that its occasional bobbles are forgiveable. **Creator** was directed by Ivan Passer of the greatly underappreciated **Cutter's Way**, and his cast is superlative: Peter O'Toole (especially) as the Nobel laureate biologist who hopes to recreate his long-dead wife from her own tissue cells; Mariel Hemingway, who attacks her role as the free spirit who loves him with "luscious bravado" (to quote an admiring friend); and Vincent Spano as the impassioned graduate student fought over by O'Toole and David Ogden Stiers. Give this one a try — you may be surprised how long it lingers with you. ■

SMOOTH TALK

SWEET DREAMS



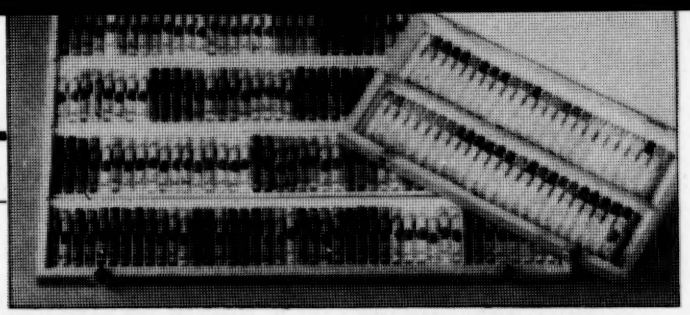
AFTER HOURS

Daniel Smith, Inc.

GARTA HODGE: Here is an immense selection of absolutely first rate fine arts supplies, as well as a wonderfully prompt and efficient mail order house. Their goods are discounted, generally 20-30 per cent off retail, and are interestingly and informatively laid out in their illustrated (photos) yearly catalogue, supplemented by intermittent special sale catalogues. In terms of sheer care and knowledgeability, no other art supplier I have found even comes close.

The fine artist is at home here. Unlike most of the other large art supply houses like Flax, Pearl, etc., they focus on fine arts and secondarily on graphic arts. This rounds out the spectrum of materials available, and as they stock nothing that can be replaced by a better item, one can relax a bit concerning purity and quality. Shipment of papers, always a bugaboo with mail order, is effectively solved by virtually indestructible double-wall cardboard flat containers (however, there is a $25 minimum paper order), so they will arrive in perfect condition.

Daniel Smith has grown from a small manufacturer of fine etching and lithographic inks to their present just described stature, without sacrificing one bit of integrity; one couldn't really ask for more.



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Chi Pants

ANNE HERBERT: Chi pants are amazingly comfortable. What makes Chi pants different is that they have a gusset, a panel of fabric that goes across the crotch instead of a seam going up and down the crotch.

This makes a couple of differences. For people like me who sit a long time it means the seam doesn't ride tight on your genitals and hurt. For active people, it means you can do things like squatting and karate kicking with no danger of ripping out your pants. For everyone it means a lot more looseness around the loins.

For me Chi pants make the same kind of difference my first pair of running shoes did — a whole new category of comfort. The kind I have look like jeans — the design difference doesn't show. Non-denim styles are available. Of the people in the office who have tried them, I love them, Ted Schultz likes them, and Don Ryan thinks his old jeans are fine. If you're interested in comfortable clothes, they may be worth a try. Even if you don't find them revolutionary, they're still good pants.

The shorts are supposed to be especially good for guys because the gusset cradles your balls so they don't hang out.

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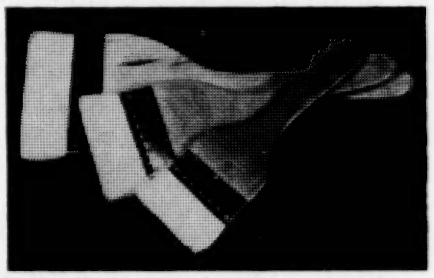

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Chinese Hake Wash Brushes

Chinese flat wash brushes are good quality dye wash brushes that can be used to create subtle, blended backgrounds. Inexpensively priced, the *hake* wash brushes are made of sheep hair bristles, long hard wood handles, and solid metal ferrules. They will hold a lot of dye or fabric paint. The widest brush, at almost 5", will cover a large area with one sweep. These brushes also would work well as wax resist brushes for large areas.

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3¼"	3.50
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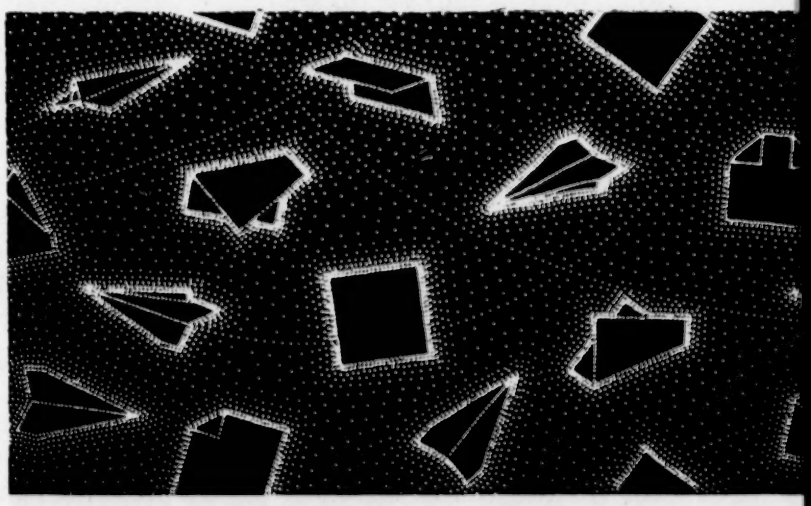


"Paper Airplanes," mulberry paper stencil used in katazome (stencil resist) dyeing. —Cerulean Blue catalog

A Silk Worker's Notebook

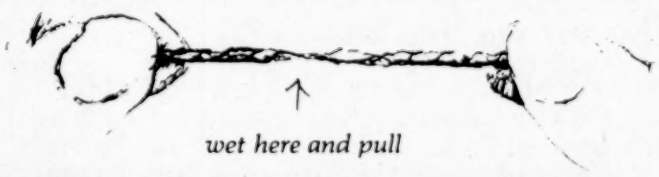
KEVIN KELLY: Once a precious, handmade book fit for museums (silk fabric samples throughout), mentioned in ***NWEC*** *(p. 279), this loving treatise about the character of silk has been issued as an affordable trade paperback (no samples, alas). It's about the practical techniques of using silk, in all its varieties, and how silk's unusual origins shape the personality of its fabrics. It's by hands passionately intimate with this queen of fibers.*

•

Silk as it comes from the cocoon is coated with a protective layer called silk gum, or sericin. The coating may be any color: White, yellow, brown, beige, green; its color is not related to the color of the silk beneath it. The silk gum is dull and stiff, so it is usual to remove it to reveal the pure, lustrous, soft silk fiber. Silk with all its gum is called *raw silk*. Raw silk is silk in its strongest, most elastic and most durable state.

There are several processes for removing the silk gum. Called "degumming," "stripping," "boiling off" or "schapping," the process may remove all the gum, or only a portion. Silk which retains some gum is stronger in all respects than if the gum is completely removed. Partial degumming will give a silk whose luster is softly muted.

True raw silk should not be confused with the fashionable "raw silk" fabric, actually woven from noil silk.

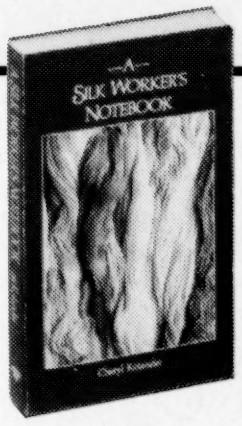


wet here and pull

Rayon and some other synthetics weaken when wet — silk does not.

•

Satin (said to derive from *Zaytung*, the Chinese name for the fabric). Satin is a weave especially identified with silk. It is par excellence the weave to show off silk's luster and experience its richness. Have you ever held a skein of yarn and wished its lush visual texture and hand could be transferred directly into fabric? Satin is the weave that does this. In satin, the warp threads literally float over long areas of the surface of the cloth. The floating warps are stitched down to make a firmly woven cloth that still preserves the visual qualities of the freely draping yarns. The different patterns made by the stitching-down weft threads give rise to the many different types of satins. Satin is smooth, soft and lustrous, but because the weave consists of long surface floats, it is weak to friction and surface wear.



A Silk Worker's Notebook
Cheryl Kolander
1979, 1985; 155 pp.
$12.50
($13.50 postpaid) from:
Interweave Press, Inc.
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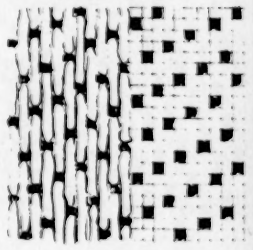
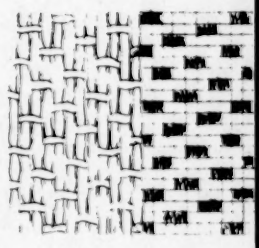
Loveland, CO 80537
or Whole Earth Access

Sleeveband (detail). China, c. 1875. Silk embroidery on silk satin.

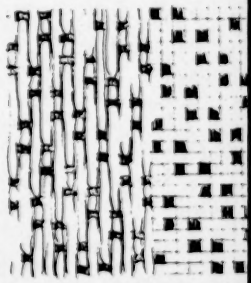
SATINS



7-shaft
"Satin Merveilleux"



8-shaft
double-stitched,
weft ways
"Peau de Soie"

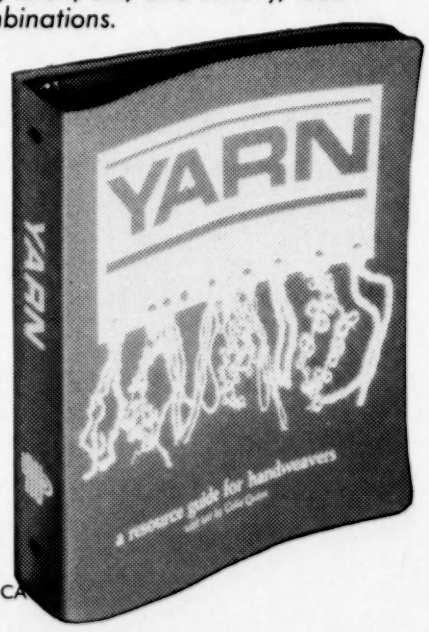


12-shaft
double-stitched,
warp-ways
"Satin Grec"

Yarn

KEVIN KELLY: A passel of yarn samples that won't get lost. Black & white photos of yarn blends show what's available somewhere in yarn-world. Each specimen is identified by manufacturer, but regrettably not by name — so there's no easy way to let a craft store know which one you need. You do get to see what manmade and natural fibers (wool, hair, linen, silk, and cotton), look like in all their likely combinations.

Yarn
(A Resource Guide for Handweavers)
Celia Quinn
1985
$15.00
($17.69 postpaid) from:
Interweave Press
306 North Washington Avenue
Loveland, CO 80537
or Whole Earth Access

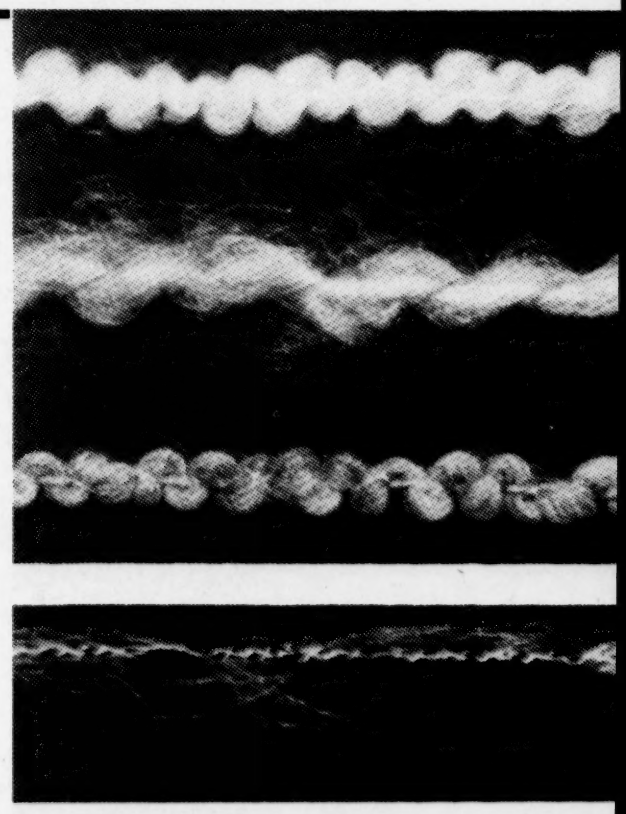


WB63 — 97% wool, 3% binder, S twist, novelty, textured, lustrous, slightly fuzzy. 300 yd/lb, 604m/kg, Ironstone Yarns.

WB64 — 47% wool, 47% acrylic, 6% polyester, 3-ply, S twist, novelty, heather, textured, fuzzy, some luster, 295 yd/lb, 594m/kg, Crystal Palace Yarns.

WB65 — 98% wool, 2% nylon binder, 3-ply, Z twist, novelty, textured, heather, slightly fuzzy, matt with slight luster, 275 yd/lb, 553m/kg, Runtee Fiber.

HB18 — 70% mohair, 25% wool, 5% nylon, 4-ply, hard Z twist, novelty, very fuzzy, matt with some luster, 1175 yd/lb, 2364m/kg, Halcyon.

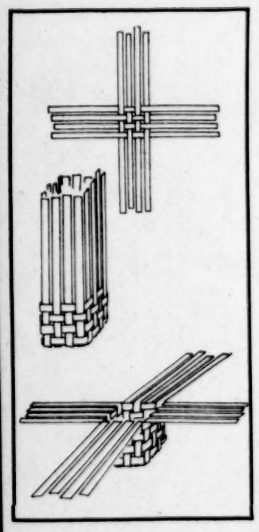


Philippine nesting baskets — bias plaiting with twists.

Plaited Basketry: The Woven Form

BUD CRAWFORD: For woven baskets, the definitive book. Every permutation of pattern, of bottom, of top-edge. The spiral binding will annoy bookstores, but delight basket makers, because it lies flat for use. The drawings and photos are clear and well presented, the text clear and energetic. Shereen loves baskets with a contagious enthusiasm. She loves the materials, the intricacies of shaping, the final geometry. You hope for companion volumes: Materials, coiling, twining, history, free-form building. But there is really nothing to change in this one.

This is not a beginner's book. It assumes a basic basket literacy. But for anyone who wants to go farther, to know more, it is by far the best book currently out. The price may seem steep, but measured by ideas per dollar, it's a steal.

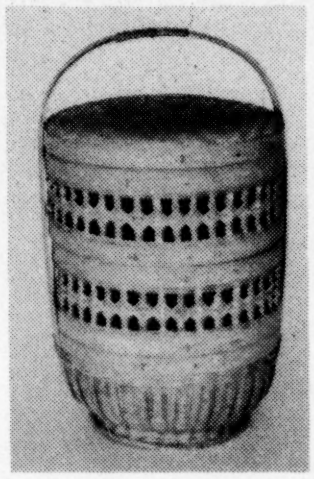


Plait a base, either square or rectangular, with either odd or even numbers. The base will be the bottom of the recessed hole.

Plait up the sides with separate weavers, as though it were a straight plaited basket. The height of the sides will be the depth of the recessed hole.

Fold out the ends — away from the basket.

Plaited Basketry (The Woven Form)
Shereen LaPlantz
1982; 206 pp.
$17.95
postpaid from:
Press de LaPlantz
899 Bayside Cutoff
Bayside, CA 95524



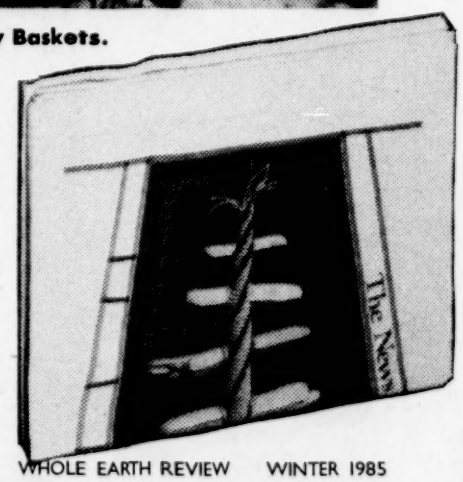
Chinese multiple basket — straight plaiting with double layer work, pattern plaiting and needle lace variations. Notice that the lip overlaps are nailed/stapled in place, also notice the inner collars that allow each basket to lock onto the basket below it.

The News Basket

STEPHEN SEITZ: It took me only a few minutes of reading this newsletter to feel some of editor Shereen LaPlantz's enthusiasm for basketmaking. Written informally and informatively, this tabloid contains book excerpts, workshop information, sources of supply and all that you would expect to find in a newsletter, including a particularly useful section that she calls "Focus on Business." It's useful for both novices who are all thumbs and nimble-fingered basketry experts.

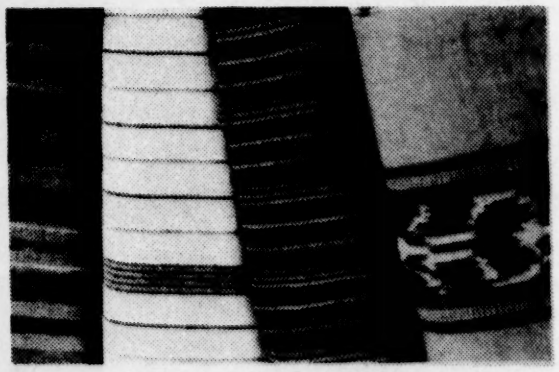
Brent Brown of Hedgerow Baskets.

The News Basket
Shereen LaPlantz,
Publisher
$10/yr.
(6 issues) from:
LaPlantz Studios
899 Bayside Cutoff
Bayside, CA 95524



Crafts and Creative Alternatives in Central America

CINDY CRAIG: Finally there's a way to support the working people of Central America directly. This catalog sells Central American products such as coffee, cashews, and handmade items. You buy the goods, the peasants make the money. Self-sufficiency and self-determination are supported. Pueblo to People is a nonprofit organization; products purchased through their catalog provide desperately needed income to the people of Central America. If you're going to buy coffee anyway, buy it direct from the source.



Crafts and Creative Alternatives in Central America
Catalog **free** from:
Pueblo to People
5218 Chenevert
Houston, TX 77004

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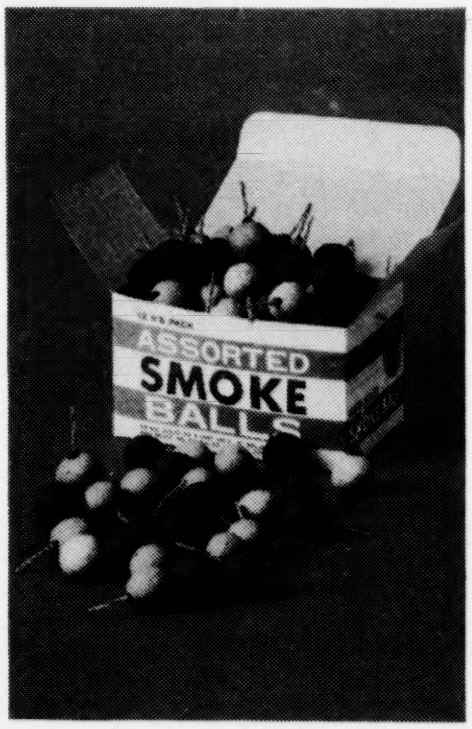
Footloomed 100% Cotton
Guatemalan "tipica" material. 36" wide. Per yard $8.00. For samples send $2.00.

Mail-Order Fireworks

TED SCHULTZ: For those of us who like to celebrate year-round events like birthdays, New Year's Eve, or the end of a wonderful day with fireworks, here are three mail-order sources offering some really great Chinese- and U.S.-made fireworks. Blue Angel is generally the cheapest, though Neptune and Olde Glory undersell them on particular items. Olde Glory has a small selection, but they're geared toward smaller lots on individual items. Shop around — the full-color catalogs are fun to look at if for no other reason than to admire the pretty Chinese fireworks packaging.

A word on ordering: These companies will ship to states where fireworks are illegal, and it's up to you to deal with your local fire marshal, who may be notified of the shipment by the trucking company. This has happened so often in California that Blue Angel no longer ships there. Of course, friends in other, less strict states could receive your packages for you . . .



Colored Smoke Balls — $9.10/6 dozen. Have fun with this item which puts out clouds of smoke. —Olde Glory Fireworks

Blue Angel Fireworks

Catalog **$2** from:
Blue Angel Company
P. O. Box 26
12900 Columbiana-Canfield Road
Columbiana, OH 44408
800/321-9071

Neptune Fireworks

Catalog **$1** from:
Neptune Fireworks Company
P. O. Box 398
1300 Stirling Road #3A
Dania, FL 33004
800/835-5236

Olde Glory Fireworks

Catalog
$2
(refundable) from:
Olde Glory Fireworks
P. O. Box 2863
Rapid City, SD 57709
800/843-8758

NEW UNCLE SAM ASSORTMENT

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A-015A Contains: 6 strips 100 1½" Firecrackers, 1 pc. 100 Floral, 4 pcs. #5 Floral Shells, 6 pcs. Night & Day Shells, 12 boxes Gold Sparklers, 2 pcs. 10-Ball Roman Candles, 2 dozen Bottle Rockets, 4 pcs. 10" Missiles, 12 pcs. 4-oz. Rockets, 6 pcs. Chinese Fountains, 2 pcs. Ground Spinners, 6 pcs. B-1 Bombers, 6 pcs. Whistling Missiles, 6 pcs. M-60's, 1 pc. Garden In The Spring, 1 pc. Large Happy Fireworks, 1 dozen Baby Bee Planes, 4 dozen Whistling Bottle Rockets, 3 pcs. Tanks, 10 packs Jumping Jacks, 2 pcs. 25-shot Saturn Battery.
Minimum Order: One . . . . . Retail Value $89.95
now $49.95
BUY 5, GET 1 FREE! *—Blue Angel Fireworks*

Bits and Pieces

KEVIN KELLY: Nifty keen catalog of gigantic mural-sized jigsaw puzzles, scrambling such unusual subjects as classic paintings and old maps. They have merely large ones for the less fanatical, in addition to all manner of 3-D puzzles for the dedicated puzzlist.

Bits and Pieces

Catalog **free** from:
Bits and Pieces
125 Walnut Street
Watertown, MA 02172

GIRAFFE HERD
This unusual wood puzzle from England is 9" x 12" — and a real stand-out. $50.

•

D. Temptation of St. Anthony

Will you be tempted by the world's largest, most complex puzzle? Clear a room for this 12,000-piece, 5½'x8' (that's "foot") puzzle of Heironymous Bosch's masterful painting. Think of the bragging you can do when (if) you complete it.
Item 3404 . . . . . $95.00

THE COMPLETE FIREWORKS CONSTRUCTION KIT

Copy-protected. $35. Commodore 64, 128; Activision. McGrath Power, 500 Fifth Avenue, 58th floor, New York, NY 10110; 212/730-0680.

STEVEN LEVY: As the best computer simulations often do, FIREWORKS CONSTRUCTION KIT provides enough reality to satisfy long-held fantasies. Pull up your lawn chair and program a pyrotechnic celebration from an impressive array of fireworks, ranging from mortars to roman candles to big sprays that generate little flags coming down on parachutes. You're in total command of the scope, noise level, and color of these pyrotechnics. (I especially like the white flash accompanying the crackling explosions.) There are dozens of songs to play in the background, everything from "Stars and Stripes Forever" to "The Blue Danube." You can get up and running in no time, and it's especially fun to time big bangs to music like "The William Tell Overture." This is one fireworks package guaranteed not to blow up in your face.

OBLIQUE STRATEGIES

A Design Oracle

by Brian Eno and Peter Schmidt

1) Photocopy these pages.
2) Glue to card stock, cut into cards.
3) Shuffle.
4) When confronted with a design problem, pick one at random and follow its direction.

These cards were created by musician and producer Brian Eno (Roxy, Devo, Talking Heads) and painter Peter Schmidt. Eno describes their use:

"You'd be in a panic situation in the studio. You tend to proceed in a very linear fashion. Now, if the line isn't going in the right direction, no matter how hard you work, you're not going to get anywhere. The function of these cards is to constantly question whether that direction is correct."

A few of these oracles were contributed by Whole Earth staff. The others appeared in the March 1979 issue of WET *Magazine. Does anyone have others they find useful? —KK*

Destroy:
nothing
or the most important thing

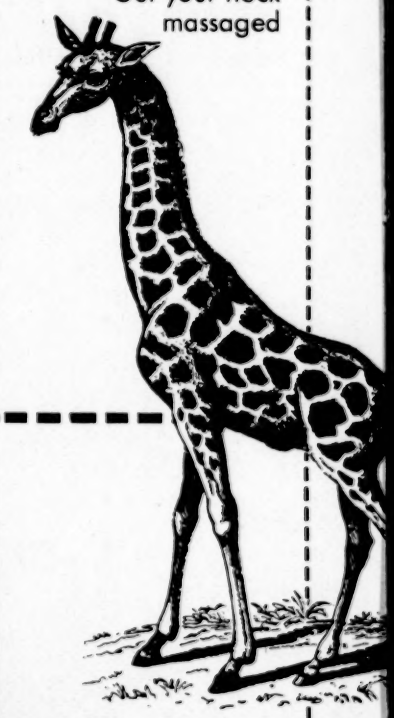
What would your closest friend do?

Do nothing for as long as possible

Fill every beat with something

Make a blank valuable by putting it in an exquisite frame

Get your neck massaged

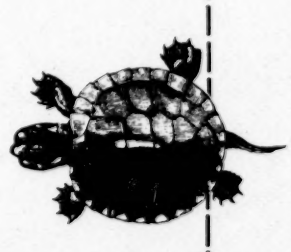


Call your mother and ask her what to do

Imagine the music as a series of disconnected events

Listen to the quiet voice

Work at a different speed



Emphasize differences

Twist the spine

Use fewer notes

Change nothing and continue with immaculate consistency

Remove the middle, extend the edges

Water

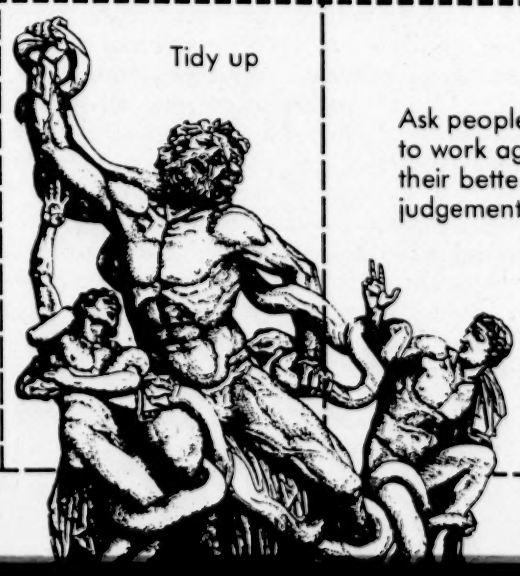
Take a break

Make an exhaustive list of everything you might do and do the last thing on the list

Trust in the you of now

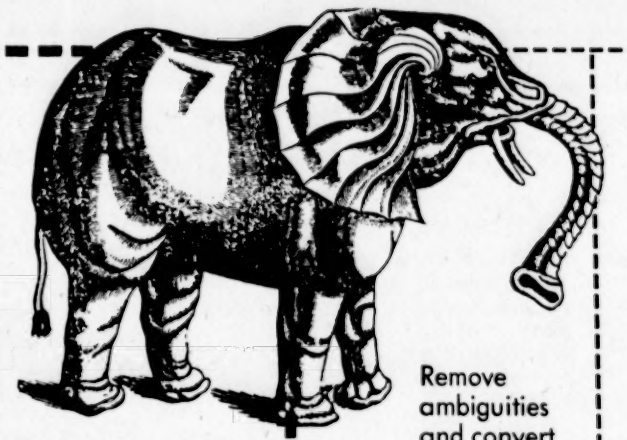
Tidy up

Ask people to work against their better judgement



Ask your body

Breathe more deeply



Don't stress one thing more than another

Remove ambiguities and convert to specifics

Use "unqualified" people

Is the tuning appropriate?

Take away the elements in order of apparent non-importance

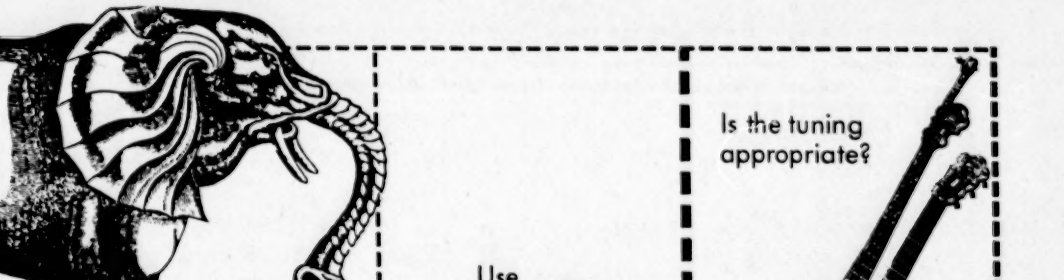
Courage!

Infinitesimal gradations

Accept advice

Reverse

Faced with a choice, do both

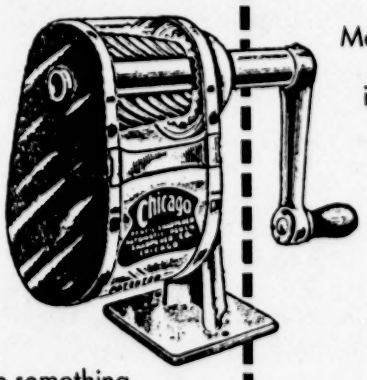


Emphasize repetitions

Discover the recipes you are using and abandon them

Remove specifics; convert to ambiguities

Mechanicalize something idiosyncratic

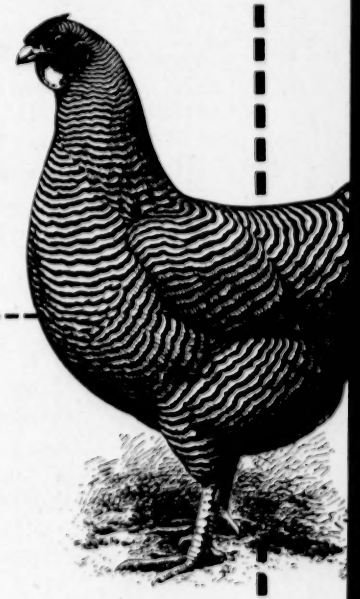


Do something boring

Disconnect from desire

Bridges: build or burn

Repetition is a form of change



Pay attention to distractions

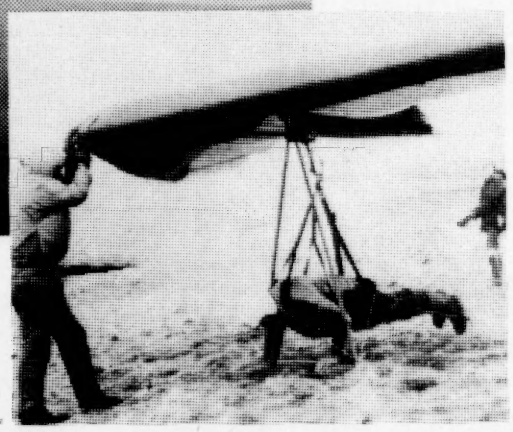
Humanize something that is free of error

Look closely at the most embarrassing details and amplify them

Don't be frightened of cliches

Use an unacceptable color

How not to engage the stirrup: the pilot is not concentrating on flying speed.

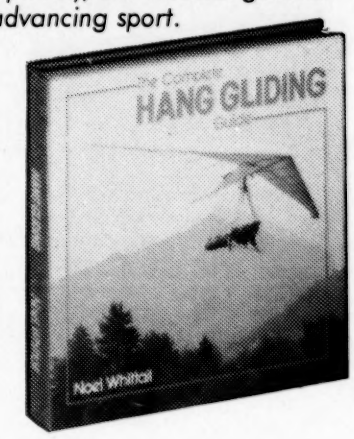


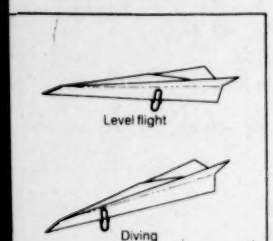
The essential pre-flight hang check. An assistant sees that the harness is not twisted while the pilot checks his height above the bar.

The Complete Hang Gliding Guide

HANK ROBERTS: Lots of color pictures and diagrams give a good feel for what's fun about hang gliding these days. Short of reading four years' worth of hang gliding magazines, you won't find the experience related as clearly and comprehensively as here. Not an instructional book (for that see **CQ** *#36, p. 112), but the best general coverage yet of a rapidly advancing sport.*

The Complete Hang Gliding Guide
Noel Whitehall
1984; 158 pp.
$14.95
($16.20 postpaid) from:
Sterling Publishing Co.
2 Park Avenue
New York, NY 10016
or Whole Earth Access



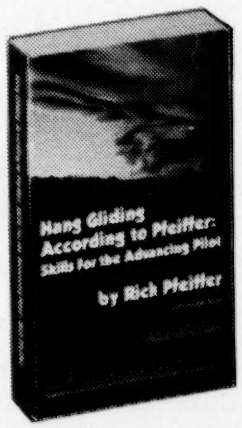


Demonstrating weight shift with a paperclip and a paper dart

Hang Gliding According to Pfeiffer

CHARLIE CARLSON: This book might more aptly be titled "Hang Gliding for Type 'A' Personalities." World-class hang glider Rich Pfeiffer's dedication to winning more competitions and flying farther than anyone else comes across most strongly. He's so busy competing that he admits he doesn't know "how other pilots find time for sightseeing." Too bad.

Pfeiffer is a fanatic about hang gliding equipment. He says a stainless steel carabiner should be used rather than an aluminum one, parachutes should be repacked every four months, and harnesses should be capable of withstanding free fall. Hearing his ideas is a must if you are a serious hang glider pilot.



Hang Gliding According to Pfeiffer
(Skills for the Advancing Pilot)
Rich Pfeiffer
with Maggie Rose
1984; 238 pp.
$9.95
($10.95 postpaid) from:
Publitec Editions
273 Lower Cliff Drive
P. O. Box 4342
Laguna Beach, CA 92652

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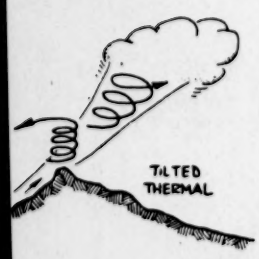
Wave soaring is a technique which has allowed pilots to achieve some of the highest altitude gains recorded in a hang glider. And, although waves develop only in certain limited situations, those situations occur in every month of the year. Since they develop most often during the winter months (least frequently in summer) and when strong winds blow through a stable air mass — the very times when thermal development is LEAST likely — waves offer an alternative form of lift which increases the number of days with soaring possibilities. Unfortunately, waves also involve some of the most severe turbulence.

•

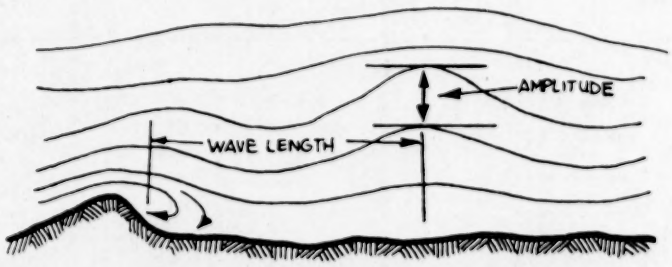
While evaluating your area, it's not enough to note likely lift generators; you must also assess whether the lift produced at a given spot will get you to another lift source. A sea-coast bluff may be a terrific soaring site, but it might be virtually useless in a cross-country flight. Think in terms of possible routes: estimate how high you'd need to get at Point A in order to glide to Point B, the nearest likely trigger spot. Then, where could you reach from Point B?

•

Keep an Eye Out for Signs of Lift — As you climb in a thermal, assess potential lift sources along your route. By the time you approach top-out altitude, you should have already chosen the direction to take. Don't wait until you top out to look around and decide which way to go next.



If you're flying in lift that's "tilted" by the wind, you'll need to shift your circles upwind as you climb. Otherwise, the wind and your sink rate can combine to spit you out the backside.



Waves can be compared to ripples in a stream produced by a rock or other obstruction. As the water (air) moves over the rock (ridge), it's forced upward, then forms leeside ripples (waves). While the ripples (waves) appear to be stationary with respect to terrain, the water (air) that forms them is constantly moving.

Many children glide on skis early while they are developing balance. Sometimes they need help, both for support on downhills and for motive power back uphill. If longer assist poles than shown are used, several kids can be supported or towed at the same time.

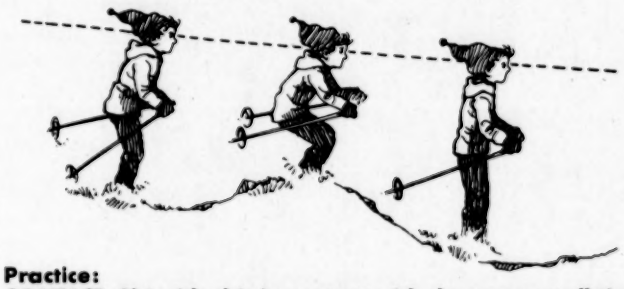
Teaching Children to Ski

J. BALDWIN: A friendly book, directed to both kids and their parents who'll likely be teaching them. All sorts of skiing are considered, including cross-country and even some daring stuff like jumping. Good drawings of kids in action illustrate the principles and are particularly good at correcting poor form. Lots of games/exercises make it all fun. With this book and a batch of recently available scaled-down equipment, the whole family can hit the slopes together.

[Suggested by Charles Chesney]

Teaching Children to Ski
Asbjorn Flemmen and Olav Grosvold; translated by Michael Brady
1983; 176 pp.
$8.95
postpaid from:
Leisure Press
Human Kinetics Publishers, Inc.
P. O. Box 5076
Champaign, IL 61820

or Whole Earth Access



Practice:
CONTACT. Ski with skis in contact with the snow at all times.
SWALLOW BUMPS. Ride out bumps, swallowing them with your knees and body.
HEAD LEVEL. Sight ahead at some object and keep your head level as an aid to stability.

How to get up. First, skis up to untangle them, to make it easier to get up. For falls on hills, set skis on downhill side of the body before getting up.

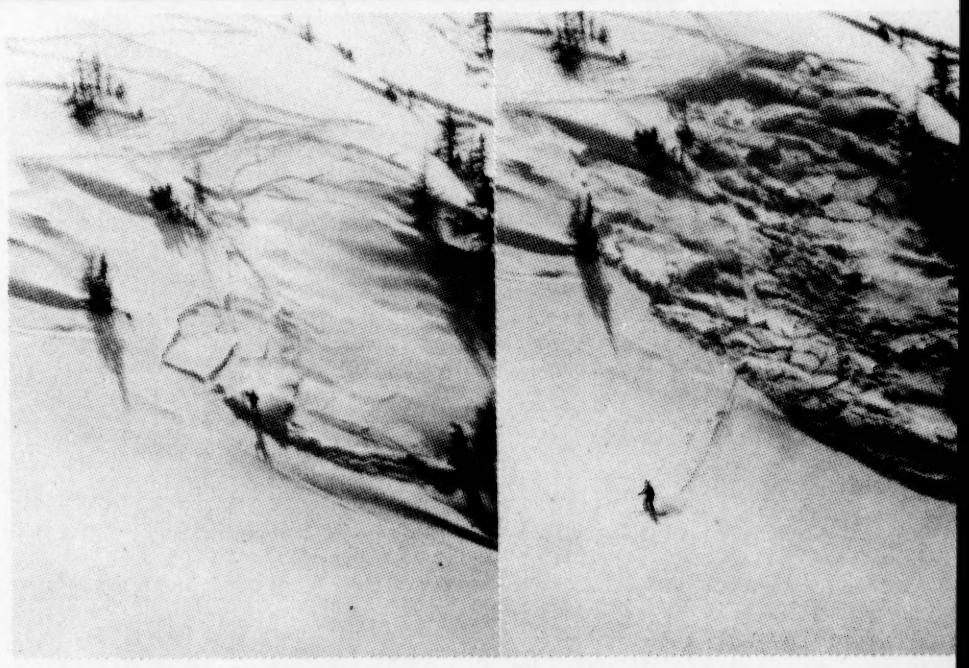
Avalanche Safety

LANCE ALEXANDER: The best, clearest and most practical explanation of avalanches and avalanche safety I've read. Stresses understanding mountain weather, topography and snow structure leading to avalanches so one can learn to avoid hazardous areas and travel safely on snow-covered mountains. It goes on to cover rescue and first aid procedures in detail and has a fine section on the use of avalanche rescue beacons. Dramatic photographs and excellent diagrams make this sometimes complex subject easy to understand. Frequent anecdotes make for interesting reading. Read it before heading out next winter; it could save your life.

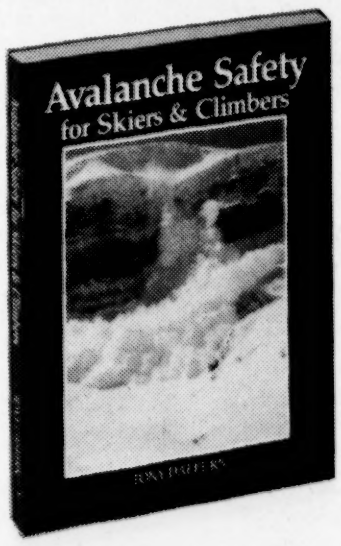
•

What to do if avalanched:
Fight for your life. Shout out so your companions know you are in trouble. Throw away your ski poles; you should already be free of the wrist loops. Kick off your skis. Grab at trees or rocks. Wriggle free of your pack. Swim.
Shut your mouth as soon as your head goes under and try to hold your breath for as long as possible.
Get into a sitting position facing downhill, with your legs out front and together.
Make a last desperate effort to pop yourself out if you're below the surface when the slide starts to slow down.
Make a breathing space in front of your nose and mouth with one hand and push the other one towards where you think the surface is.

When the snow comes to rest:
Don't shout unless you hear rescuers immediately above you; sound will not penetrate through more than a few cm of snow.
Don't struggle to free yourself; you will only be wasting energy and precious oxygen.
Try to relax and if you feel yourself about to pass out don't fight it. The respiration of an unconscious person is shallower, their pulse rate declines and the body temperature is reduced, all of which reduce the amount of oxygen needed.



Examples of quick slab release. Note how the snow fractures, cracks and starts moving all at the same time.



Watch the snow on the inside corner of a kick turn. Does it break loose as a cohesive slab?

Avalanche Safety
(For Skiers and Climbers)
Tony Daffern
1983; 172 pp.
$9.95
($10.95 postpaid) from:
Alpenbooks
P. O. Box 27344
Seattle, WA 98125

Climbing and Hiking in Ecuador

KEVIN KELLY: A tiny country crammed with a large number of volcanoes — 30 — eight of them active. Although Ecuador has a long history of mountain climbing (mountain here means volcano), including expeditions in 1736 and 1744 to measure the hypothesized bulge of the equator, hiking conditions have not advanced much in 250 years. Trail routes and hiking information of any kind are hard to find. Yet unfrequented snow-covered peaks await an often short trek through jungles that are approachable by local bus. This technical guidebook provides routes, preparation tips, and suggestions for journeys (one day to one week) into an incredibly diverse wilderness.

•

What to Bring

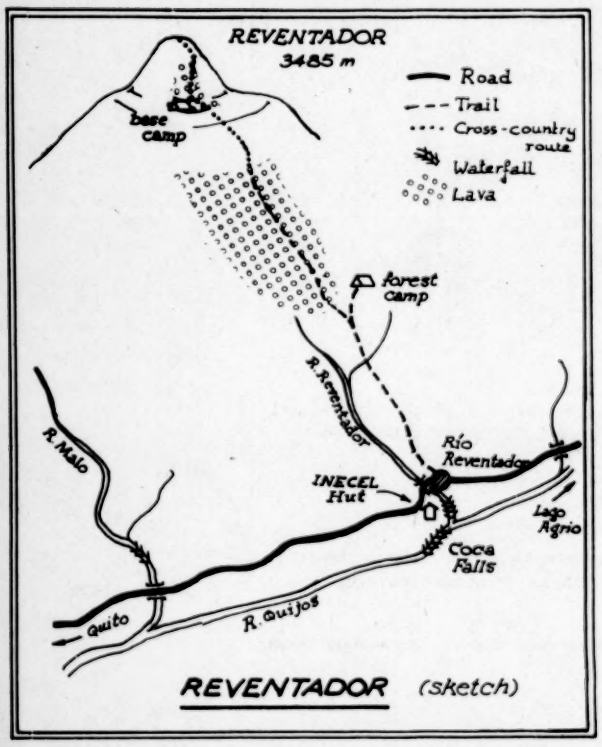
In the words of Edward Whymper (1877), "It is indeed true that nearly everything may be obtained in Ecuador. It is also true that we often had great difficulty in obtaining anything." Although climbing and backpacking equipment is available for sale and hire it is usually very expensive and often inadequate. If you're large then you'll have difficulty in finding clothing and particularly footwear to fit you since Ecuadorians are generally small. It is best to bring what you need with you. It is easy enough to find storage facilities for your excess gear whilst you are hiking or climbing.

•

Climbing Reventador — The Right Way

Ask the lady who runs the store to introduce you to one of her two elder sons, Don Jorge or Don Segundo. Jorge has been all the way to the top of the volcano and could guide you there, whilst Segundo only knows the first section to the beginning of the climbers' trail. To get to the beginning of the trail takes about an hour and once there you should have no difficulty in following the trail as described in my account. The first hour to the trail-head is rather complicated, however, so it would be worth hiring Jorge or Segundo to show you this section — I paid Segundo 50 sucres for this.

If neither Jorge nor Segundo is available and you want a guide to the top then you can hire Sr. Guillermo Vasquez who lives in the Pampas area some 4 km closer to Quito. His house is near the school and he is experienced — but by all accounts expensive.



REVENTADOR (sketch)

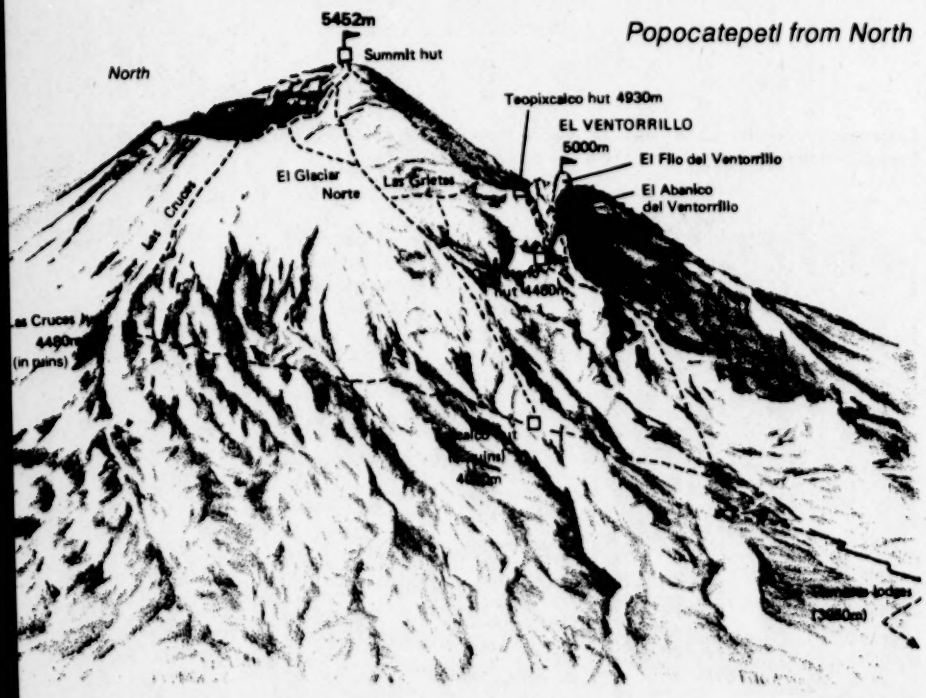
Climbing and Hiking in Ecuador
Rob Rachowiecki
1984; 161 pp.
$10.95
postpaid from:
Bradt Enterprises, Inc.
93 Harvey Street
Cambridge, MA 02140
or Whole Earth Access

Mexico's Volcanoes

KEVIN KELLY: A half-dozen volcanoes in the Mexico City area offer a quick way for climbers to scale peaks over 16,000 feet. Huts along the way provide shelter. Some ascents require no special equipment. This volume details more than one way up each summit and has explicit directions on perhaps the most difficult part — finding your way along the dirt roads to the correct place to start. A fine book for some fine (though manageable) challenges.

•

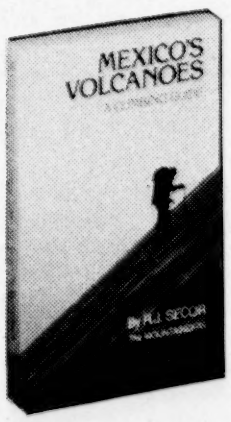
Most Americans who visit central Mexico for the purpose of hiking and climbing concentrate on the three highest volcanoes — El Pico de Orizaba (5700 m; 18,700'), Popocatepetl (5452 m; 17,887'), and Iztaccihuatl or "Ixta" (5286 m; 17,342'). Altitude is the only major difficulty usually encountered on these mountains. And herein lies the attraction of these mountains: they allow mountaineers to climb to 5000 m (16,400') with a minimum of expense and time from the United States, thus allowing the climber to experience high altitude (though the total amount of time spent above 4300 m or 14,000' is usually less than 24 hours). Equipment needed is the same as would be required for a climb of any of the major Cascade peaks or for a spring climb in the Sierra Nevada of California. Technical difficulties are minimal, though occasionally snow and ice conditions demand the use of an ice axe, crampons, and rope.



Popocatepetl from North

•

I hold a tent to be a grand nuisance while carrying it and an indispensable item once it is set up in the rain and snow. There are huts on all of the popular routes on the high volcanoes, and with good timing, you will have little use for a tent. On weekends and during Christmas holidays, expect to find the huts full, so a tent would fall under the category of "essentials." At other times it is a heavy luxury.



Mexico's Volcanoes
(A Climbing Guide)
R. J. Secor
1981; 120 pp.
$8.95 postpaid from:
The Mountaineers
306 Second Avenue W.
Seattle, WA 98119
or Whole Earth Access

New Improved Good Book of Hot Springs

KEVIN KELLY: "Stalking the Wild Hot Springs" might be an appropriate subtitle for these funky periodic booklets. So far volumes 3½, 4, 5 and 6 have been issued since the series was reviewed in ***NWEC*** *(p. 403). The game in each case is to find and get into one of the thousands of undeveloped wild hot springs that hide in yonder hinterlands (look for a plume of steam on the horizon). It's not as easy as it sounds and that makes for good adventure.*

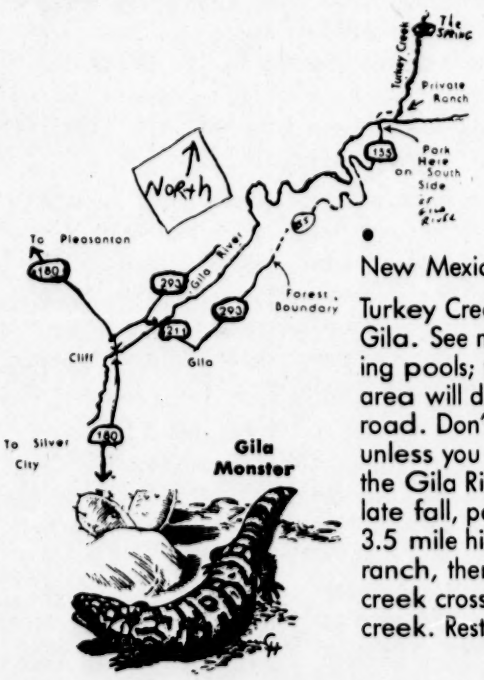
These booklets are directories to known hot spots, complete with reports from sundry hotspringers who have actually dipped in, on where the waters are, how to get there from your car, what the bottom is like, what the temperature is, is anybody around? There's also lots of questing stories and poolside yarns about stalking the Ultimate Wild Bath. Occasionally there are testimonies of soaks in extra-national hot springs, but in the main, access is to North American baths.

For rediscovering the many untamed hot springs not mentioned by other sources, you'll need ***The Good Book****, a geological listing of all known hot springs west of Kansas. The data was compiled by George Berry et al., and printed by the government. Not to be confused with an earlier, less comprehensive list by Gerald Ashley Waring, also printed by the government and warmly known as the Good Book (****NWEC*** *p. 403), now out of print. Berry's list gives the map coordinates and topo map name where each spring is found (they are still remarkably arduous to find). Many of the entries are merely boiling trickles. The editor of* ***Hot Springs Gazette*** *chattily comments on the bathable springs.*

•

Idaho:

Indian Bathtubs. This one misses 5 stars only because the water is under 100°. The water checks in at 99° and gurgles pleasantly over some fancy rocks. The pool is 93°, about 4 feet deep and 15 feet across, and set in one of Nature's perfect niches. A little work on the dam could easily deepen the pool a couple of feet and turn this into primo snorkel territory. Getting there is not easy. Begin at the "1-Stop" bar on the South edge of Bruneau, Idaho. Head South on the paved road for 7.5 miles where you'll turn right and go across an iron bridge. Go 0.7 mi. from the bridge to a sign that points to Sugar Creek. Follow the sign 3 mi. to a fork in the road. Take the left fork. Another mile will bring you to a small parking area above a small canyon. The spring is at the bottom. —*Hot Springs Gazette*



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New Mexico:

Turkey Creek Hot Springs. 4 stars. Near the town of Gila. See map. Plan to do no work on the natural soaking pools; they're ready and waiting. The drive into the area will discourage most sightseers — 12 miles of dirt road. Don't try this trip in the late spring or early summer unless you are prepared to drown in the floodwaters of the Gila River. At any other time, preferably summer to late fall, park at the Gila River crossing and begin your 3.5 mile hike. Cross the river and head East to a private ranch, then North along Turkey Creek. Enjoy the 3 or 4 creek crossings, waterfall, and 12-foot deep pool in the creek. Rest thy weary bones, hiker!

The Hot Springs Gazette
Eric Irving, Editor
$3.95/issue
Vol. 3½, The Rockies
Vol. 4, The West Coast
Vol. 5, Spring Fever
Vol. 6, Foreign Planets

The New Improved Good Book of Hot Springs
George W. Berry, et al.
1984; 99 pp.
$4.95

both postpaid from:
Doodly Squat Press
P. O. Box 480740
Los Angeles, CA 90048

•

Colorado Conniptions

State	Lat.	Long.	Spring Name
6 ID	42.388	112.085	Downata Hot Springs
ID	42.339	112.436	Kent Warm Spring
ID	42.156	112.348	Pleasantview Warm Springs
7 ID	42.056	112.246	Woodruff Hot Spring

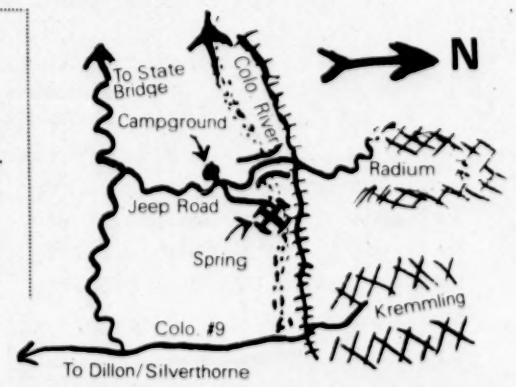
6 Downatta Hot Springs. Commercial warm swims and hot soaks. No nudes. 4 miles Southeast of Downey.

7 Woodruff Hot Springs. South end of Malad. Commercial but funky hot soaks. Gazette #3½.
—*The New Improved Good Book of Hot Springs*

•

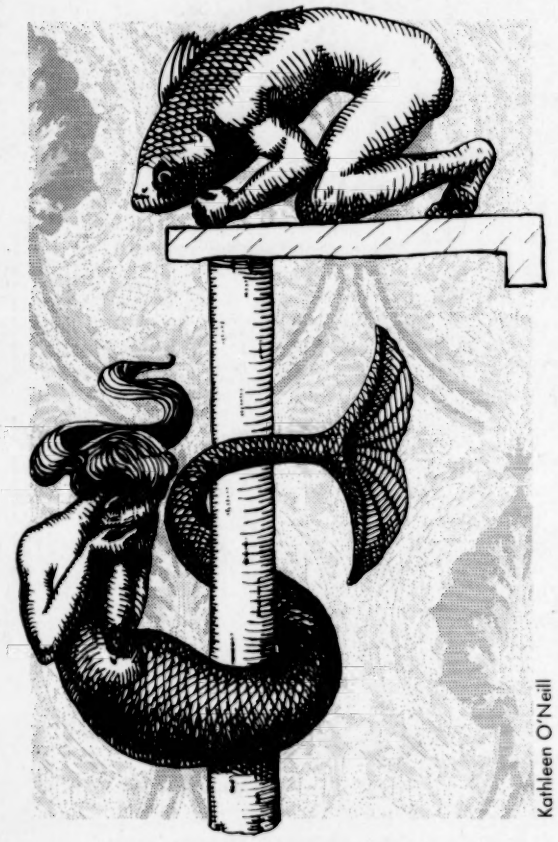
I recently received some inside info from an old-time Colorado River rafter about the existence of an uncataloged hot spring used mainly by the river runners.

I visited the spring this winter by skinny ski (see location map below). The spring is at the murky river's edge, sometimes under the water during spring snow run-off. Visitors have deepened the rock-lined pool to about four feet deep, accommodating four very close friends. The water is relatively free of little furry slimes and is constantly bubbling up through tiny fissures in the rock and sandy bottom. The temperature, even under snowy skies, was about 94 F. The only distraction would be the occasional long freight train passing by on the opposite bank. The only inhabitants in the area are at the train junction (Radium) about a half mile down stream.



Echoes from readers back
to the *Whole Earth Review*
(27 Gate Five Road,
Sausalito, California 94965)

St. Herpes



Kathleen O'Neill

thank you
for your wonderful article
I've
thought the sensationalization of herpes
part of that grand 'ol
Nancy Reagan War on Change
if people would go to church
drink & get rich there'd be no problem
s
the same immature
senselessness which leads me to smoke pot,
meditate, drop acid, masturbate, write poems,
fuck & write a letter to a stranger whose
article I'm only halfway through cause I
dug it so much seems to be what led to
your herpes
I almost want
to congratulate you on following your heart
but I'm not insensitive to the pain St. Herpes
included w/ hir blessings
I've
never read anything before by someone who
admitted to having herpes
it's like Anne Sexton's "Menstruation
at 40"
speaking the poetry of her life, of
the thoughts
and feelings that formed her soul
even tho many looked askance at her
for admitting life ain't the way
they say it is emperor w/o clothes
looks good contains truth & beauty
hard to be upset by anything he says

of course, herpes is unfortunate
while menstruation is not
but the outcaste status of the Order
of St. Herpes
reminds me of the fear "The Curse"
inspires in JHVH in the Pentatuch
"don't touch her, don't sit where she
sat, don't have nothin ta do wit her"

as Tim Leary says
it's the outcastes who make it new
whether homosexual, jew, poet or
Herpestian monk

I do tend to ramble
one of those vices (see above)
I should do something about

for your wonderful article
thank you
dear Stephanie Mills

love,
Eric
Tempe, Arizona

Ain't no joke: Ecosphere broke

We were "bit by a gotta" last spring and sent for a "Ecosphere." Unfortunately, before we were able to cut a hole in the wall for a permanent display, one by one our shrimp began to die.

Somehow, down deep, I feel it is all part of the plan. My Ecosphere now sits on my desk. Each day I look at the shrimp on the bottom and say to myself, "Aha, one of these days, you too, will be laying belly-up somewhere on the bottom of the universe.

So be it.

We look forward to your progress report and comments on such a wondrous idea. It would have been so nice if the results had been more positive for us. How about your shrimp? Let us know.

Patricia Longnecker
Columbia River
Maritime Museum Shop
Astoria, Oregon

They have all gone the way of yours. Apparently both our globes were from a batch that experienced an unusual 25% failure rate triggered by extraneous wild algae. The creators have replaced ours (and would replace yours) with a new one seeded with cultivated algae, more amenable to the shrimp. Long live the ecospheres.

—Kevin Kelly

Eco-slime

Here's 20 bucks to tide you over till renewal time. Don't feel bad about the Back Coverathon; I need you a hell of a lot more than I need public television, and I'm not a child of the '60s (only 22) nor do I own a 'puter. (I will though, when I go back to school and can get one on the cheap through the University).

I currently have 11 bottles of various sizes filled with assorted slime and ooze and one upended Skippy jar with moss and lichen in it (Ecosphere, *WER* #46, p. 28). Only one has died out so far, some have been alive for several months. I don't know what makes the California edition worth 250 bucks, maybe it's the blown glass and the guarantee. Looking at them raises all sorts of possibilities.

In a 16 oz. Pepsi bottle they evoke the anarchist's favorite drink. Could this be a pacifist edition? Sakarov Cocktail? Those prone to futile symbolic gestures could throw them at missile silos, destroying a micro-world to symbolize the potential destruction of our own. I can see the headlines now, "Anti-Nuke Kooks Throw Slime at Silos." And speaking of Space Art (*WER* #48, p. 26), what could be better than two small spheres set rotating about each other like a dumbbell, each containing an ecosystem, one salt and one fresh. Put it at the exact opposite side of the sun, on earth's orbit, our alter-ego.

Anyway, keep on. You mean a whole lot to me. In fact you probably mean a lot more to me in your impoverished state than you would if you were fat and slick *a la* a certain organic boating mag whose subscription I have finally let lapse.

Take care,
Andrew Kydd

Eden come, Eden go

In the year 2941 a vehicle sliced across the grain of space heading toward the rim of the universe. Its occupants, homo sapiens from the planet Earth, came from a well-evolved protein-based breed that had in the last century unlocked space/time. Now travel, that is, real travel unhindered by Einsteinian distance, became possible. In fact, it was this latest advance which showed the universe was finite, and the "edge" could be approached.

To make a long story short (or condensing an epic billions of years long into a walnut shell), the craft hit the rim of the universe setting off a buzzer. Two youths watched the proceding through their microdelve and dutifully noted the time.

"Let's see," said Hoehlu, "That's 26 minutes 04.6173 seconds from implantation of amino acids on the central planet until the protein reached the edge of the medium. The best time of any substance so far. What's the next assignment?"

Hloene checked the text.
"Electrino silics."

"O.K.," said Hoehlu, "Sterilize the medium while I load the seeder."

Richard Virdone
Littleton, New Hampshire

Nailing down eco-defense

In a singular act of empowerment, over 20,000 metal spikes of all sizes have been driven into the living trees of Meares Island logging cut blocks. 53% of this pristine 20-mile island has received government logging approval, despite the fact that the local natives have never sold, given, been conquered, or ceded by treaty any of their traditional lands. There is now an Appeals Court injunction against logging until the native land claims can be heard in court.

In September 1984, I wrote to MacMillan-Bloedel Chairman of the Board, Adam Zimmerman: "Spiked, the land lies living; logged, the land lies dead. A spiked tree is a living tree for our children." This resistance by natives and whites has been met with much concern by the loggers; a single spike could decimate a modern high-speed sawmill.

Given empowerment and unity together, we feel our resistance on Meares Island is a positive hope for the future here.

In peace and life,
C. J. Hinke
Tofino, British Columbia

The hubris of violence

A few years ago, I inherited some land under prior contract to a timber company. When lawyers told me I couldn't break the contract, I tried to make the best of it by cooperating with the cutting, hopping to save enough good tree stock for healthy regeneration. In the end, both the land and I were abused, exploited, and wounded; the harm done played a major part in the bitter failure of later efforts to create enterprise and community, and, in the case of the land, will take a century to heal. Given the absence of a tree-hugging fellowship, in hindsight my biggest mistake was the cowardice that held me back from unbridled tree-spiking, fuel-tank-sugaring, and endless rude phone calls late at night.

I'm not innocent or pure, I've met very few people who might be pure, and I don't like any of those I've known who claim to be pure. Self-righteousness is consistently bad news, if you must find an enemy, violence (against property, persons, or even ecosystems) may be merely a

James Donnelly

tactic, and secondary. Consequences are primary. By participating in the neo-imperial American economy, I know I'm contributing to the ongoing infliction of miseries equal to or worse than mine, here and elsewhere — ameliorating this reality is a matter of slow fumbles and half-steps, so far as I can see.

Pierce Butler
Natchez, Mississippi

Eco-saboteurs in reverse

Violence tends to become a two-way street. And wilderness values are particularly vulnerable to violent attack. Suppose that a voice said to you over the phone, drop that lawsuit against development or clear-cutting, or we'll blow up the General Sherman tree and cover Half Dome with orange paint. Obscene? Disgusting? Unbelievable? Once people get used to violence, once it's trendy, once people praise and defend violence in the media, everybody will get the idea.

Herbert Highstone
Oakland, California

Sabotage is not terrorism

Terrorism is one of the most overused and misused words today. Blowing up a bulldozer miles from any other people is not terrorism. It is sabotage, the destruction of property.

Terrorism is directed against people. It is intended to kill people, as many people as possible, and preferably in a gruesome manner. There should be a degree of randomness so that others feel that it could happen to them at any time. Unless, of course, they or their rulers concede what is demanded. This is not the same as blowing up a tractor or two.

I am not trying to sidestep ethical issues by using words. Sabotage is violence. The risk of taking human life, either through the inadvertent effects of the sabotage, the unexpected presence of bystanders, or through confrontation with security personnel, can be high. Murder can be a risk implicit in sabotage. But it is inherent in terrorism.

Walt Noiseux
Syracuse, New York

Self-dividing holy wars

All of the physical events taking place on this planet are symbols for internal states manifested by both individuals and groups. More specifically, war — whether between nations or against the planet's wilderness — is a symptom of self-division. It represents a spiritual sickness in which humans so lack an integrated viewpoint that they attack other humans (who are, in reality, other aspects of themselves), or they engage in the longer-term suicide of destroying their own life-support system and its beauty.

When you engage in "counterterrorist" activity such as advocated in Ecodefense: A Field Guide to Monkeywrenching (*WER* #47, p. 14), you enter into the realm of self-division, acting out a self-hatred for the part of your humanity that is polluting or destroying or whatever. Rather than ending the problem, you give it strength by validating the thought structure that supports all war.

Although I agree that a human life is, at our level of reality, more valuable than a tractor, when we engage in acts of eco-terrorism, the primary act that reverberates through our reality is not the stopping of the tractor but the act of negative aggression — which is the same act as would have been carried out by the tractor owners! In the short term you save a couple of trees. In the long term you give strength to negativity. That is why "holy wars" are a contradiction. You cannot bring about the sacred by offering up your tremendous life energy to the profane. The fact that some people can hold such a contradictory concept is itself a sign of their self-division.

Perhaps you will find the above arguments difficult to accept. The writer, you will say, has a waterlogged brain from too many hot tubbings at Esalen. Actually, I've never been in a hot tub (and I'm a fourth generation Californian!), let alone to any of the Great Groks of the California spiritual scene. To me, all I've said is a kind of common sense. Tom Paine and the other founding fathers might not recognize it. But then, they were a bunch of materialistic, reductionist, utilitarian freemasons who hardly provide a model for the direction we must now take. If all we do is see the polluters and despoilers as a latter-day King George; if we simplistically view our task as a struggle of good

guys against bad guys; if we are focused primarily on the external symbol that is earth: We will be guilty of the same short-sighted materialism, reductionism, utilitarianism and mechanistic worldview that got us into this mess — and will have created yet another reason why the ecology movement will fail and this reality will be brought to an end.

Ric Mallamo

Tidbits

One woman to another, Boise, Idaho, 1985:"She looks just like Peter Paul and Mary."

Hand-written note in supermarket, Sheridan, Wyoming, 1981: "This pure Argentenian corned beef is made from the finest cuts of lip, eyeball, and asshole."

One young man to another, the Tenderloin, San Francisco, early morning, 1975: "I feel like the back of my head is crying."

Sign outside a lumberyard, Lakefork, Idaho, 1985: "Law of the Yukon: Only the lead dog gets a change of scenery."

Young man to young woman, Oregon coast, 1978: "Living with her is like trying to eat cheese at the beach."

An old packer's advice, McCall, Idaho, 1983: "If you think a square peg won't fit in a round hole, you've never prodded a mule with a two-by-four."

Conversation at Mary Jo's wedding, Palo Alto, Ca, 1971: Woman: "What is wrong? We don't connect. You haven't said a hundred words to me in the last ten days." Man: "I don't want to talk about it."

A young sandblaster's advice, Valley County, Idaho, 1979: "You never learn younger."

A plumber's tale, Petaluma, Ca., 1980: "I quit cowboying the day that I rode over a hill, looked down on a herd of a hundred steers, and realized that there was nothing looking back."

A railroader, Western Nebraska, 1961: "On a nice, calm, Spring day out here, you can still fly a cast iron kite."

Sign outside a lumberyard, Lakefork, Idaho, 1985: "Diplomacy is what keeps you saying 'Nice Doggie' while you are looking for a rock."

—J. D. Smith
McCall, Idaho

Ode to a helicopter

A helicopter with a full tank of fuel weighs slightly more than a VW bug. The aircraft engine weighs the same as the one the Wright brothers first used at Kitty Hawk, but it produces 33 times as much horsepower. And when the turbine is operated at maximum speed it spins the first stage of the compressor at almost 1000 revolutions per second. And that's not all; flying a helicopter is so simple it's been demonstrated that monkeys and other lower primates can be taught to handle it with confidence.

Seeing the country from the cockpit of a helicopter turns you into a great observer. You see everything and are a part of nothing. One minute you can be skimming the desert watching four-foot lizards race for their holes, and thirty minutes later you can be watching a formation of eagle rays, or a lemon shark, or a green turtle, in the clear shallows there by Manifa.

There's always that rare day when you see the completely unexpected: The golden eagle I saw on a dune that winter day at Udhaliya — so big I thought at first it was a goat. Or the wolves living along the banks of a small river whose source is the group of hot springs at the Al Hasa oasis. (They were the only animals I ever found not to be afraid of the helicopter.) Or that day, taking off from a platform on the Arabian-Iranian border, when a blue whale and her calf surfaced beneath me. She was a conservative 75 feet long, her calf at least 15. So much larger was she than any other animal I'd ever seen the whole thing seemed impossible. If everyone could experience at least once the feeling I had that day I don't think we'd have any endangered species.

On the days that fail to provide a whale, or a camel caravan, you can take the helicopter on a "strafing" run at an Arab fishing dhow or at a Mercedes cargo truck. Then, with all your nervous energy expended, you can land back at the hangar and emerge from the aircraft appearing to all (except those close enough to know better) as a calm, sane individual who harbors no frustrations and needs so such crutches as tennis or sailing or motocross to get rid of his unwanted job stress. If you're ever in need of another line of work you might consider taking up flying a helicopter. All that's required is that you be an action junkie with a short attention span. How about it?

Dale Jacobs
Saudi Arabia

Izums are memes

The fact that Will Baker recognized out-of-control belief systems rather than people as the root of problems in Nicaragua (Izum in Rinkydinkaragua, *WER* #46, p. 4) may be one sign that the human race is starting to develop immunity toward mind parasites — the worldwide isms that take control of us and set us at each others' throats.

Richard Dawkins came up with a name for isms and related self-replicating information patterns in the last chapter of *The Selfish Gene*. He called them "memes" (rhymes with "cream") to remind us of memory and genes. His point was that memes are subjected to survival pressure in the meme pool of human culture just as genes are in a gene pool. The effect of this kind of survival is an eerie kind of effective "volition" on the part of genes and memes alike. One can say that a meme (like a gene) tries to spread out and take over the world. They don't succeed, of course, because they run into other memes and genes that are trying to do the same thing. However, some of them (like the NAZI/master race meme) gave us a bucket of grief.

Knowing that infectious belief systems trap other people and that the right one could trap us might take some of the dangerous edges off the things. Knowing why some memes can obtain such a hold over people could lead to both more effective advertising (shudder) and a way of proofing people against being sucked in by cults, isms, and excessive patriotic fervor.

On the other hand, this meme-about-memes has me writing a letter to *WER* after midnight. It has hopes of spreading out through your press to 100,000 or so readers. . . .

H. Keith Henson
Tucson, Arizona

Don Ryan

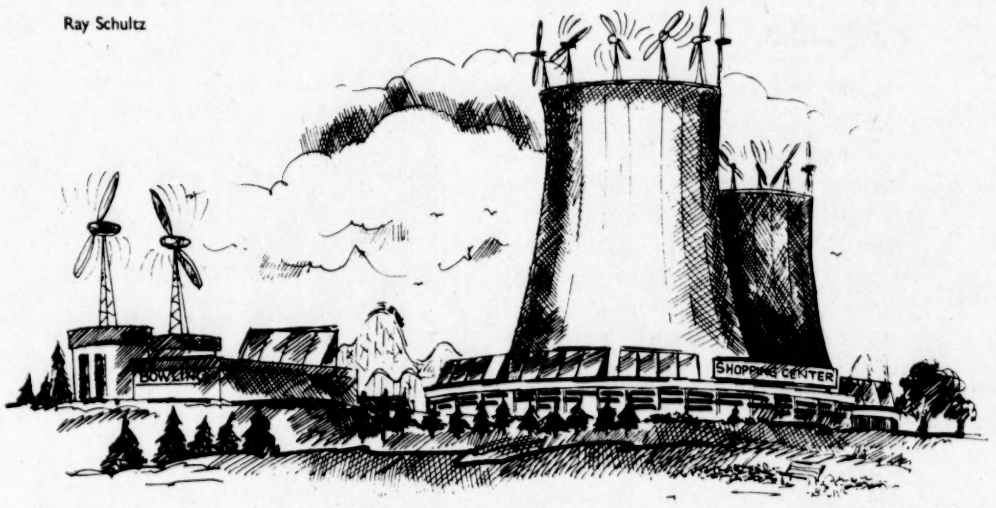
Post-nuclear mall lust

I enjoyed the NRC's idea for Three Mile Island (*WER* #48, inside cover). We here in Rockford have proposed our own suggestion for Commonwealth Edison's Byron Nuclear Power Plant, only 17 miles from here.

As you can see, it's completely energy self-sufficient, with the latest MASA wind generators and solar collectors. Unfortunately, Unit 1 has just come on-line at a cost of $4 bil.

Stanley Campbell
Rockford, Illinois

Ray Schultz



BYRON MALL
Units 1 & 2

Misgivings about Worker's Trust

Last year I became self-employed and thus in need of private health insurance coverage to replace the company policy I was giving up. I decided on Blue Cross because it seemed the simplest way to go. However, after reading your article on Consumers United (aka Worker's Trust) (*WER* #45, p. 103), I felt that they sounded more in tune with my personal political philosophy. I applied for coverage with them. My experience has, unfortunately, been negative. Their politics and investment strategies may be enlightened, but their screening process is decidedly not. For the sake of balance, your readers should be made aware of what happened to me.

First, let me correct a piece of misleading information that appears in your article. You state that Consumers' monthly premium is the same regardless of age or sex. It's difficult to imagine, but I'll assume that that is somehow true for your group. It is not true for individuals. Premiums escalate drastically depending on age, as they do with any insurance company that I know of.

In addition, in my area Consumers' monthly cost is almost exactly the same as Blue Cross's. Their benefit structure is, however, significantly better and, as you say, they don't discriminate against women.

The key to a private policy these days is whether or not you qualify for the company's "healthy participant discount." They all seem to have one and if you get it, it turns an unmanageable monthly payment into one which is merely outrageous. I was turned down for this discount by Consumers United.

Here's the good news: I gave up cigarettes and red meat over eighteen years ago and have not touched either since. I exercise between 1 and 1½ hours a day, every day. At 5-11, I weigh 160, which is what I weighed in school twenty years ago. My diet is low in sugar, salt, fat and cholesterol, and I eat no processed foods. My blood pressure is low and I have a resting pulse rate of 72. I live and work in rural Virginia, a relatively pollution-free area. In any consideration of healthy lifestyles I've ever seen, mine ranks in the 99th percentile.

And here are the "complications": I have seasonal hay fever which I am able to completely control with careful diet and the judicious use of appropriate medication. And, like most people my age, I suffer from lower back pain. I have, however, chosen to deal with this aggressively. I have shunned cortisone shots and the like and have worked with an osteopath to develolp a comprehensive therapy program. Results have been extremely good, to the extent that I am now entirely on my own. So much for Consumers' supposed commitment to alternative health care. And that is the end of the complications column. Really.

I can only speculate as to why I was turned down. One obvious possibility is that a very old scam is running here: Offer people a discount if they meet certain conditions, then make sure nobody meets them. I mean, seriously, is there anyone around the forty-year mark with no problems of any kind? If so, (s)he has been hiding from me. And if Consumers United is getting applications from a lot of people with pristine records, then a lot of people are not quite telling the truth.

After my rejection, my insurance agent (who encouraged me to apply to Consumers United even though he gets no commission from them) had this to say: "Consumers is a mail-order-only insurance house. This cuts their overhead, yes. But it also means that you aren't dealing with a person face-to-face. You aren't dealing with someone who knows you and can tell the company what the state of your health really is." This can be a serious drawback, as I think my case amply illustrates. In addition, he believes that Consumers United also keeps costs down by screening out most applicants for the discount, which is a polite way of saying what I said in the previous paragraph. I stress that he knew he wasn't going to get my health insurance business no matter what happened and that he, in fact, believes strongly in the basic principles of co-ops and is himself a member of a land cooperative.

All things considered, my primary disappointment is that a company with so many progressive policies is such a failure in ways crucial to the changing of the health care situation in this country. I hope that sharing my experience with your readers will represent a positive contribution toward achieving that goal.

And, oh yeah, Blue Cross approved me for the healthy participant discount without a question.

P. S. I communicated my disappointment to Consumers United and sent them a more detailed account of my lifestyle than they had originally asked for. I felt that everyone deserves a second chance. They still turned me down.

I know this is a long letter, but I hope you can fit at least most of it in "Backscatter." Perhaps then it will come to the attention of the Consumers' executives. We can only hope that they may not quite be aware of what their underwriters are doing. Change comes slowly.

Doug Hornig
Afton, Virginia

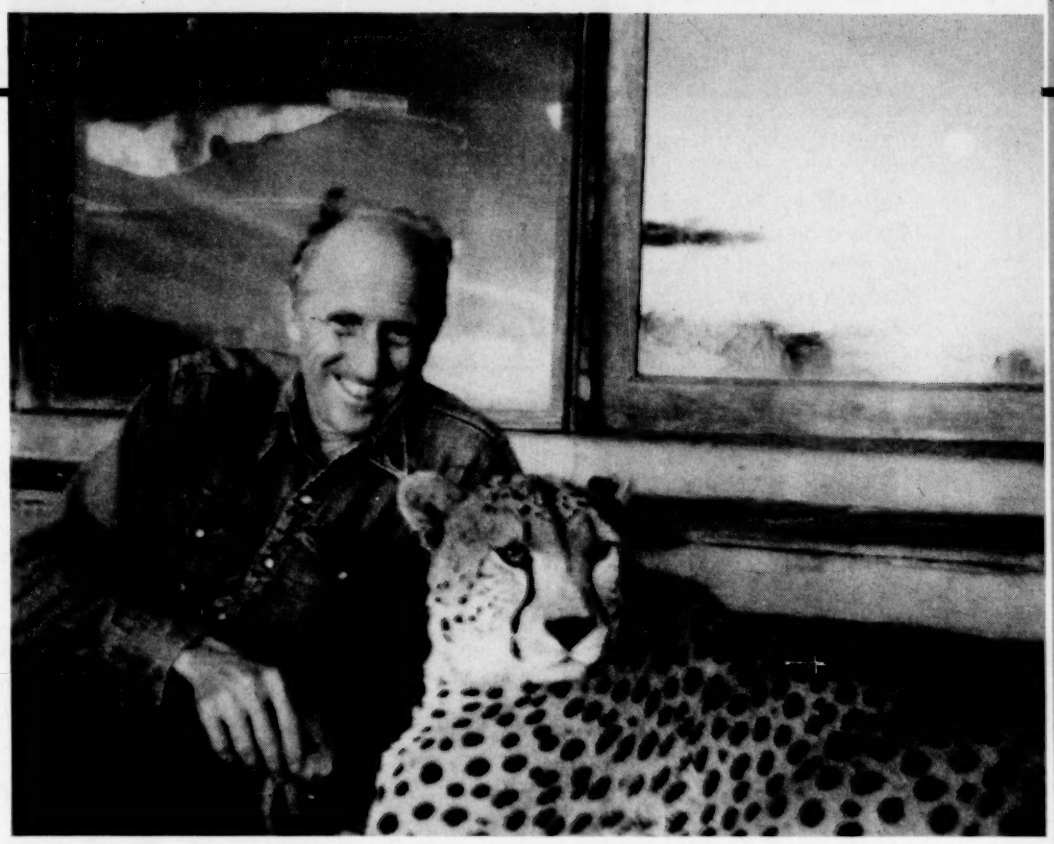
Gossip

Taking this magazine's name quite literally, we need to read aerograms to keep up with the Whole Earth staff. We lost a good man to Peru when Joe Kane, who edits our weekly column in the San Francisco ***Chronicle****, landed there to attempt a full-length navigation of the Amazon by kayak. It's a five-month adventure mapped to begin at the river's whitewater source in the Andes. Armed with a sizeable advance from a New York publisher for a book about the expedition, Indiana Joe set up his headquarters near Cuzco and dutifully sent us the obligatory postcard:*

I am in Arequipa, a city of 700,000 people, no flies, no traffic lights, and no joggers. Like most Peruvian cities, Arequipa was discovered by two Peruvians named Hotel Simon Bolivar and Plaza San Martin. The people of Arequipa are uniformly short and fat, which makes me taller and thinner than in real life. Unfortunately I have the only bald head in the city; I have compensated for this oversight of nature by training the locals to address me as "Lord Joe." . . .

The expedition has been delayed by general anarchy so the closest thing to the Amazon I have seen so far is the stream of filtered cerveza I let fly each night just before the floor rises up to meet me. Will be at 17,000 feet in four days. —Joe

Around the equator about 7,500 miles from Joe, there's Kenya, temporary home of Stewart and Patty for six weeks. Their letter comes stamped with one of those fantastically ornate stamps pre-industrial countries somehow churn out. Stewart writes:



Duma, the cheetah, and Stewart Brand, publisher-on-sabbatical, take in a Kenyan sunset.

The intense African variety of climes and critters are all as advertised, and we're reveling in them. Jogging among the wildebeest, kongoni, Thompson's gazelle, and Masai giraffe . . . everything is bigger and more dramatic — megafauna. Wooded grasslands support 200 times the weight of animals that a tropical forest does.

Our major country delve so far has been a harsh bus expedition to the deep north — Lake Turkana. Ferocious landscape, gorgeous people. (Anne Herbert-style footnote on dusky bosoms: in our culture we only see breasts aged 18 to about 33; in Samburu country you see the human gamut, from adolescent buds to old-lady flaps; specialization constricts, as usual.) Mountain cold, desert hot, crocodiles and breakdowns and robbers, and poor food whimperingly appreciated. —Stewart

Erstwhile office manager Lyn Gray headed out to Europe for two months. We've never heard from her. Must be having a good time.

WER *staffers aren't alone in sharpening travel skills. There's a travel boom in progress and an accompanying surge in travel information and services. In the last six months I've been asked for more advice on traveling than on computers —*

Thank you

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an agreeable shift, since travel is likelier to produce a ready answer from me. To evaluate and point to all the best tools for traveling, a ***Whole Earth Travel Catalog*** *is in the works. Right now it's looking for the right publisher. It will be 220 7x10-inch pages of well-regarded travel guides, travel gear, tour services, and methods of travel at all levels of comfort. To be edited by J. Baldwin and myself. Preliminary research and updating may be done through a Whole Earth Travel column assembled by Ken Conner, who edits the* ***Chronicle Whole Earth Column*** *in Joe's absence. Your suggestions and reviews of ideal travel tools are happily accepted; same rules as for this magazine (see* ***WER*** *#46, p. 112).*

An advance on the ***Whole Earth Travel Catalog*** *would help mightly to quelch the disaster baring its teeth on our financial page. That immense deficit had its genesis in the herculean task of producing the updated version of the* ***Whole Earth Software Catalog 2.0*** *— nearly 50 percent revised from the first edition.* ***WESC 2.0*** *is indeed a better book, compared to itself last edition and, especially, compared to the alternatives. As the computer ocean shrinks, so does the margin for error in shopping, and so does the once-rich pool of other sources of advice. Hence the ever-greater value of the updated* ***Catalog.*** *We will probably receive no further royalties on this edition, so our only income from* ***Catalog 2.0*** *is if you buy it directly from us. You get it at a discount ($15 postpaid) and we can keep the money.*

Last time you heard from us we needed $30,000 to keep going. We're still going; here's how it happened. We saved something like $20,000 by reducing staff and expenses after the ***Software Catalog*** *was finished. The remaining staff took an unpaid one-month furlough, gave up medical benefits, etc. Complementing that, we received almost $10,000 in donations. One was a truly anonymous $2,000 gift, and three were welcome $1,000 contributions, newly added to our roll of honored Maniacal Subscribers. Thank you! Thanks as well to the 19 others who gave $100 or more (including one donation of $750), the dozens contributing gifts of $3 or more, and the many faithful who gave gift subscriptons or extended their own subs early. Each one helped, even though we are still ailing in the intensive care unit.*

—Kevin Kelly

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All contributions are tax-deductible because we're a nonprofit foundation.

Point/Whole Earth Consolidated Report

May, June and July 1985

Income		Expenses	
Subscriptions & Renewals	65,830	Salaries:	
Back Issues	941	Editorial	32,618
Mailing List	9,917	Production	40,127
Software Catalogs	1,348	Circulation	9,953
Direct Distribution	18,955	Office	8,203
National Newsstand	14,686	Research	22,716
Syndicated Column	8,370	Payroll Taxes/Benefits	11,515
NETI/WELL	32,875	Writers/Contributors	10,610
Best of CQ	2,500	Supplies/Research	6,824
Contributions	671	Magazine Printing	30,463
Interest	730	Subscription Promotion and Fulfillment	20,708
Miscellaneous	-3	Direct Distribution	971
		National Newsstand	4,732
Total Income	**186,820**	Mailing List Fulfillment	725
		Software Catalog Fulfillment	648
		Syndicated Column	5,837
		Best of CQ	212
		Equipment Rent/Maintenance	3,643
		Telephone/Networks	5,075
		Postage	2,797
		Auto/Travel	246
		Promotion/Publicity	1,013
		Building Rent/Maintenance Utilities/Moving	10,627
		Legal/Professional	1,020
		Interest/Bank Charges	1,626
		Miscellaneous Operating Expenses	5,387
		Purchase Assets/Principal on Lease Payments	4,034
		Total Expenses	**242,330**
		Profit/Loss	**-55,510**

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2. Return from News Agents	30,900	10,890
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NETI Advance	45,000	Operating Expenses	40,382
WELL	3,078	Purchase/Assets	1,006
Total Income	**48,708**	**Total Expenses**	**41,388**
		Profit/Loss	**7,320**

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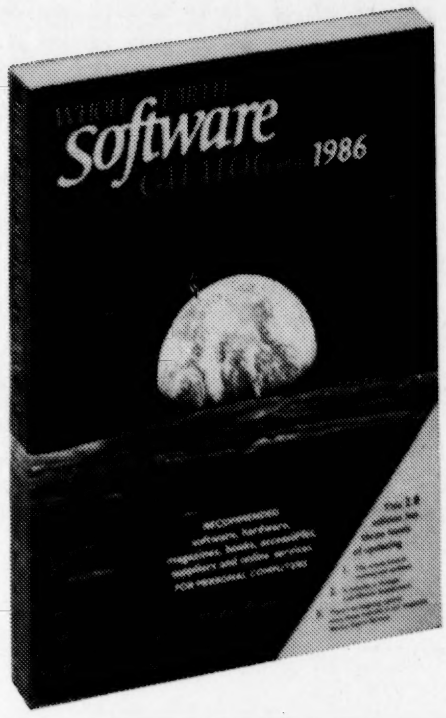

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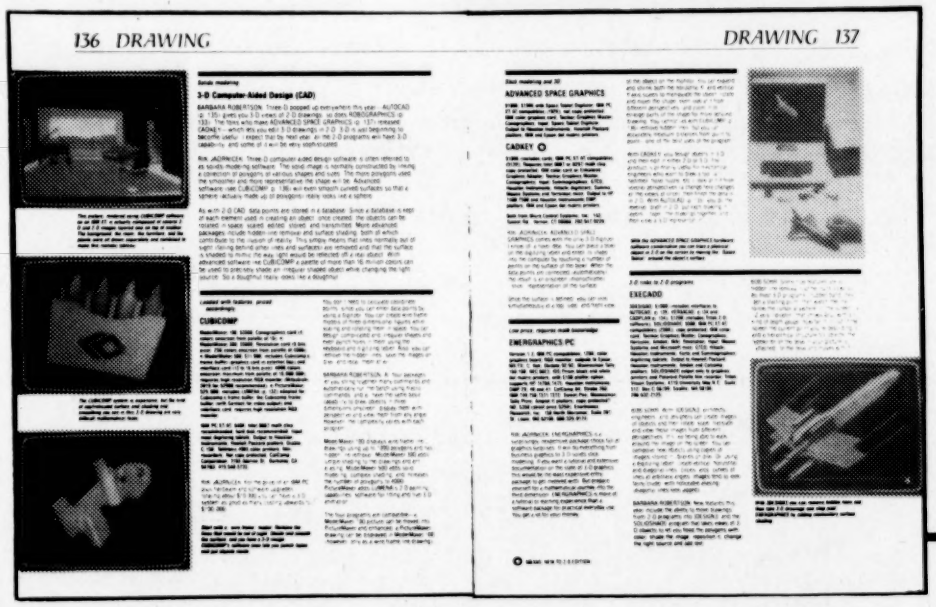
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The other 209 densely-researched pages will advise nicely for the rest of the year.

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OUR NEW MONEY?

by Kevin Kelly and Robert Horvitz

ON November 2, 1983, a closed-door briefing was held for four members of Congress and interested staff of the Secret Service, the Bureau of Engraving and Printing, the Federal Reserve, and the Treasury. They met to discuss new designs for our paper money, for the greenback bills you put in your wallet. Samples with various devices and designs were displayed as well as examples of foreign currencies that used some of these.

Among the samples were a one-, ten-, twenty-, and fifty-dollar bill displaying such anticounterfeiting devices as watermarks, imbedded mylar threads micro-engraved with the letters "USA," background tints of blue or brown, invisible machine-readable inks, and thin-film hologram-like stamps somewhat like the ones on credit cards. The Treasury Department conducted a survey with the University of Michigan to get consumer responses to this new money.

The proposed changes are being justified by claims that color photocopying technology will soon make it so easy to counterfeit our present currency (well enough to scam bill-changing machines and bank currency counters, at least) that some in the government think it desirable to alter our paper money. Precisely because color xeroxing *is* so increasingly convincing, a plan that seems severely misguided is to print dollars with a new multicolored design. The new "Monopoly" money would, at best, be printed with pastel colors on only one side of the bill, leaving the other side as is. The public is unlikely to get a preview of the new designs, a clear case of art without representation (you have to look at it every day). It will be at least two years before you'll see the new money. The main holdup is the massive retooling needed to print it.

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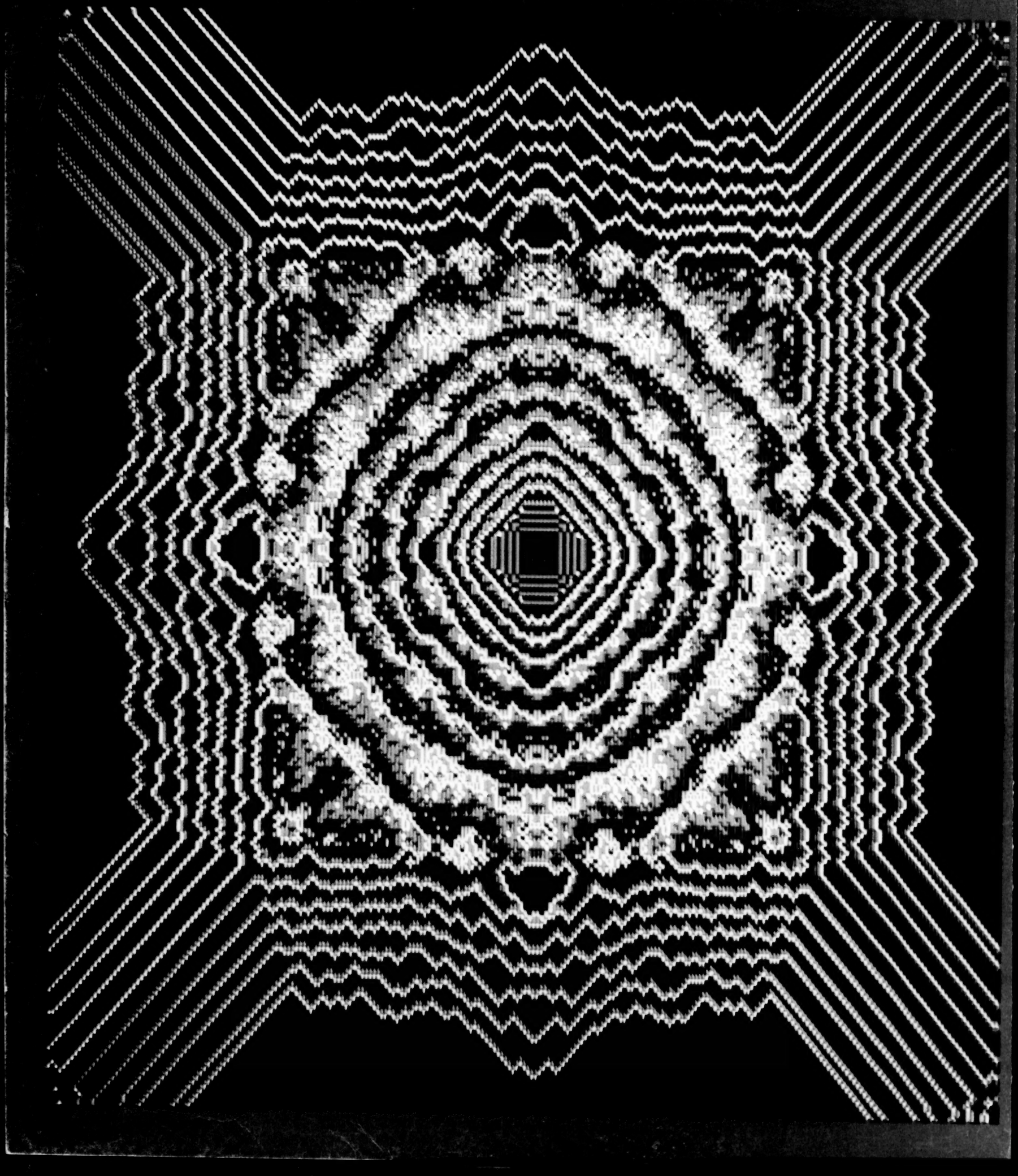
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